6720 South Macadam Avenue, Suite 300
Portland, Oregon 97219
503.670.1108

ANCHOR QEA

August 22, 2023

Mr. Kyle Satterthwaite
ACTenviro, Inc.
13600 SE Ambler Road
Clackamas, Oregon 97015

Re: Service Request—Transport and Recovery of Oil-Water Mixture Collected from the T-50 Trench System, NW Natural Gasco Site, 7900 NW St. Helens Road, Portland, Oregon 97210 (Gasco Site)

Dear Mr. Satterthwaite,

On behalf of NW Natural, Anchor QEA, LLC, is coordinating the disposal of an oil-water mixture generated by NW Natural at the above-referenced Gasco property. The oil-water mixture was generated during pumping of the T-50 trench system and is stored in 55-gallon steel drums staged on the Gasco property.

On January 20, 2023, Anchor QEA collected a representative sample of the oil-water mixture for laboratory testing. The sample was tested by Apex Laboratories, LLC, for analysis of the following:

- Corrosivity as pH (U.S. Environmental Protection Agency [EPA] 9045D)
- Resource Conservation and Recovery Act (RCRA) eight total metals (EPA 6020B)
- Volatile organic compounds (EPA 8260D)
- Polychlorinated biphenyls (EPA 8082A)
- Semivolatile organic compounds (EPA 8270E)
- Flashpoint (EPA 1010M)
- Heat of combustion (D-240)

Tabulated analytical results are included in the attached Table 1. A completed Waste Material Profile Sheet is included as Attachment A. The laboratory analytical report is included as Attachment B.

The oil-water mixture is related to the remediation of legacy contamination resulting from manufactured gas plant activities that historically occurred on the subject property, and therefore, the recovered materials are exempt from toxicity characteristic criteria as specified under 40 *Code of Federal Regulations* (CFR) 261.24. As indicated in Attachment A, the recovered liquid does not exhibit ignitable, corrosive, or reactive hazardous characteristics (40 CFR 261.21, 22, or 23), nor is it mixed with a listed hazardous waste. Based on the preceding information, the recovered oil-water mixture is not a RCRA hazardous waste. Although it is not a hazardous waste, and with the exception of manifesting and associated paperwork, NW Natural requires that the recovered liquid be managed

as if it were a hazardous waste, with fuel blending and energy recovery to occur only at a RCRA hazardous waste-permitted facility.

The accumulation of the oil-water mixture product is ongoing, and NW Natural intends to schedule periodic pickups under the attached waste profile to limit quantities stored on site. NW Natural will update the attached waste profile and analytical testing results when required by the receiving facility.

Please contact me if you have any questions.

Thank you,

Benjamin A. Uhl

Ben Uhl, RG
Senior Geologist

cc: Robert Wyatt (NW Natural); Patty Dost (Pearl Legal Group); Jen Mott and Tim Stone (Anchor QEA, LLC); Rob Ede (Hahn and Associates, Inc.); and Wesley Thomas (Oregon Department of Environmental Quality)

Attachments

Table 1	Analytical Testing Results
Attachment A	Waste Material Profile Sheet
Attachment B	Laboratory Reports and Chain-of-Custody Documentation

Table

Table 1
Analytical Testing Results

Analyte	Sample Number: T-50-DNAPL-01202023 Result	
Conventionals		
Soil pH	**7.3**	**pH_S**
pH Temperature (°C)	**24.3**	**pH_S**
Flash Point (°F)	>150	--
Heat of Combustion (BTU/lb)	**15,258**	--
Total Metals (mg/kg)		
Arsenic	**6.97**	**--**
Barium	0.522	U
Cadmium	0.104	U
Chromium	0.522	U
Lead	0.104	U
Mercury	0.0418	U
Selenium	0.522	U
Silver	0.104	U
Polychlorinated Biphenyls (mg/kg)		
Aroclor 1016	0.385	U
Aroclor 1221	0.385	U
Aroclor 1232	0.385	U
Aroclor 1242	0.385	U
Aroclor 1248	0.385	U
Aroclor 1254	0.385	U
Aroclor 1260	0.385	U
Volatile Organic Compounds (mg/kg)		
Acetone	1,000	U
Acrylonitrile	100	U
Benzene	**1,060**	**--**
Bromobenzene	25	U
Bromochloromethane	50	U
Bromodichloromethane	50	U
Bromoform	100	U
Bromomethane	1,000	U
2-Butanone (MEK)	500	U
n-Butylbenzene	50	U
sec-Butylbenzene	**56**	**J**
tert-Butylbenzene	50	U
Carbon disulfide	500	U
Carbon tetrachloride	50	U
Chlorobenzene	25	U
Chloroethane	500	U
Chloroform	50	U
Chloromethane	250	U
2-Chlorotoluene	50	U
4-Chlorotoluene	50	U
Dibromochloromethane	100	U
1,2-Dibromo-3-chloropropane	250	U
1,2-Dibromoethane (EDB)	50	U
Dibromomethane	50	U
1,2-Dichlorobenzene	25	U
1,3-Dichlorobenzene	25	U
1,4-Dichlorobenzene	25	U
Dichlorodifluoromethane	100	U
1,1-Dichloroethane	25	U
1,2-Dichloroethane (EDC)	25	U
1,1-Dichloroethene	25	U
cis-1,2-Dichloroethene	25	U
trans-1,2-Dichloroethene	25	U
1,2-Dichloropropane	25	U
1,3-Dichloropropane	50	U
2,2-Dichloropropane	50	U
1,1-Dichloropropene	50	U
cis-1,3-Dichloropropene	50	U
trans-1,3-Dichloropropene	50	U
Ethylbenzene	**1,690**	**--**
Hexachlorobutadiene	100	U
2-Hexanone	1,000	U
Isopropylbenzene	**158**	**--**
4-Isopropyltoluene	**72**	**J**
Methylene chloride	500	U

Table 1
Analytical Testing Results

Analyte	Sample Number: T-50-DNAPL-01202023 Result	
4-Methyl-2-pentanone (MiBK)	500	U
Methyl tert-butyl ether (MTBE)	50	U
Naphthalene	**26,200**	--
n-Propylbenzene	**66**	--
Styrene	50	U
1,1,1,2-Tetrachloroethane	25	U
1,1,2,2-Tetrachloroethane	50	U
Tetrachloroethene (PCE)	25	U
Toluene	50	U
1,2,3-Trichlorobenzene	250	U
1,2,4-Trichlorobenzene	250	U
1,1,1-Trichloroethane	25	U
1,1,2-Trichloroethane	25	U
Trichloroethene (TCE)	25	U
Trichlorofluoromethane	100	U
1,2,3-Trichloropropane	50	U
1,2,4-Trimethylbenzene	**640**	--
1,3,5-Trimethylbenzene	**214**	--
Vinyl chloride	25	U
m,p-Xylene	**347**	--
o-Xylene	**387**	--
Semivolatile Organic Compounds (mg/kg)		
Acenaphthene	**17,200**	--
Acenaphthylene	808	U, R-02
Anthracene	**7,580**	--
Benz(a)anthracene	**3,670**	--
Benzo(a)pyrene	**3,990**	--
Benzo(b)fluoranthene	**3,340**	--
Benzo(k)fluoranthene	**1,210**	**M-05**
Benzo(g,h,i)perylene	**2,570**	--
Chrysene	**4,980**	--
Dibenz(a,h)anthracene	**202**	--
Fluoranthene	**18,300**	--
Fluorene	**9,270**	--
Indeno(1,2,3-cd)pyrene	**2,130**	--
1-Methylnaphthalene	**15,300**	--
2-Methylnaphthalene	**22,800**	--
Naphthalene	**23,500**	--
Phenanthrene	**61,800**	--
Pyrene	**21,600**	--
Carbazole	**2,200**	--
Dibenzofuran	**1,480**	--
2-Chlorophenol	192	U
4-Chloro-3-methylphenol	385	U
2,4-Dichlorophenol	192	U
2,4-Dimethylphenol	192	U
2,4-Dinitrophenol	962	U
4,6-Dinitro-2-methylphenol	962	U
2-Methylphenol	96.2	U
3+4-Methylphenol(s)	96.2	U
2-Nitrophenol	385	U
4-Nitrophenol	1,730	U, R-02
Pentachlorophenol (PCP)	385	U
Phenol	76.9	U
2,3,4,6-Tetrachlorophenol	192	U
2,3,5,6-Tetrachlorophenol	192	U
2,4,5-Trichlorophenol	192	U
Nitrobenzene	385	U
2,4,6-Trichlorophenol	192	U
Bis(2-ethylhexyl) phthalate	577	U
Butyl benzyl phthalate	385	U
Diethylphthalate	385	U
Dimethylphthalate	385	U
Di-n-butylphthalate	385	U
Di-n-octyl phthalate	385	U
N-Nitrosodimethylamine	96.2	U
N-Nitroso-di-n-propylamine	96.2	U
N-Nitrosodiphenylamine	769	U, R-02

Table 1
Analytical Testing Results

Analyte	Sample Number: T-50-DNAPL-01202023 Result	
Bis(2-Chloroethoxy) methane	96.2	U
Bis(2-Chloroethyl) ether	96.2	U
2,2'-Oxybis(1-Chloropropane)	96.2	U
Hexachlorobenzene	68.5	U
Hexachlorobutadiene	96.2	U
Hexachlorocyclopentadiene	192	U
Hexachloroethane	96.2	U
2-Chloronaphthalene	76.9	U
1,2,4-Trichlorobenzene	96.2	U
4-Bromophenyl phenyl ether	96.2	U
4-Chlorophenyl phenyl ether	96.2	U
Aniline	192	U
4-Chloroaniline	96.2	U
2-Nitroaniline	769	U
3-Nitroaniline	769	U
4-Nitroaniline	769	U
2,4-Dinitrotoluene	923	U, R-02
2,6-Dinitrotoluene	385	U
Benzoic acid	4,810	U
Benzyl alcohol	192	U
Isophorone	96.2	U
Azobenzene (1,2-DPH)	192	U
Bis(2-Ethylhexyl) adipate	962	U
3,3'-Dichlorobenzidine	769	U, Q-52
1,2-Dinitrobenzene	962	U
1,3-Dinitrobenzene	962	U
1,4-Dinitrobenzene	962	U
Pyridine	192	U
1,2-Dichlorobenzene	96.2	U
1,3-Dichlorobenzene	96.2	U
1,4-Dichlorobenzene	96.2	U

Notes:
Bold: detected analyte
J: Estimated result. Result detected below the lowest point of the calibration curve but above the specified MDL.
M-05: Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
pH_S: Method recommends preparation as soon as possible. See Sample Preparation Information section of Apex Laboratories report for details.
Q-52: Due to known erratic recoveries, the result and reporting levels for this analyte are reported as estimated values. This analyte may not have passed all QC requirements for this method.
R-02: The reporting limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
U: Analyte is not detected above the MDL.
--: not applicable
BTU: British Thermal Unit
lb: pound
MDL: method detection limit
mg/kg: milligram per kilogram
QC: quality control

Attachment A
Waste Material Profile Sheet

WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH2569646

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # ***OR0000204701*** GENERATOR NAME: ***NW Natural***

GENERATOR CODE (Assigned by Clean Harbors) ***NW9414*** CITY ***Portland*** STATE/PROVINCE ***OR*** ZIP/POSTAL CODE ***97210***

ADDRESS ***7900 NW St Helens Rd*** PHONE: **(503) 286-1785**

CUSTOMER CODE (Assigned by Clean Harbors) ***AD26983*** CUSTOMER NAME: ***Advanced Chemical Transport***

ADDRESS ***13600 Southeast Ambler Road*** CITY ***Clackamas*** STATE/PROVINCE ***OR*** ZIP/POSTAL CODE ***97015***

B. WASTE DESCRIPTION

WASTE DESCRIPTION: ***Oil and Water Mixture***

PROCESS GENERATING WASTE: **Oil-DNAPL and water mixture generated from T-50 during site remediation efforts related to former MGP operations**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ? **No**

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE
- SOLID WITHOUT FREE LIQUID
- POWDER
- MONOLITHIC SOLID
- [x] LIQUID WITH NO SOLIDS
- LIQUID/SOLID MIXTURE
- % FREE LIQUID
- % SETTLED SOLID
- % TOTAL SUSPENDED SOLID
- SLUDGE
- GAS/AEROSOL

NUMBER OF PHASES/LAYERS

[ ] 1 [x] 2 [ ] 3

% BY VOLUME (Approx.)

TOP ***80.00***
MIDDLE ***0.00***
BOTTOM ***20.00***

VISCOSITY (If liquid present)
- 1 - 100 (e.g. Water)
- [x] 101 - 500 (e.g. Motor Oil)
- 501 - 10,000 (e.g. Molasses)
- > 10,000

COLOR

Dark/Black/Brown

ODOR
- NONE
- [x] MILD
- STRONG

Describe:

BOILING POINT ºF (ºC)
- <= 95 (<=35)
- 95 - 100 (35-38)
- 101 - 129 (38-54)
- [x] >= 130 (>54)

MELTING POINT ºF (ºC)
- < 140 (<60)
- 140-200 (60-93)
- > 200 (>93)

TOTAL ORGANIC CARBON
- <= 1%
- 1-9%
- [x] >= 10%

FLASH POINT ºF (ºC)
- < 73 (<23)
- 73 - 100 (23-38)
- 101 -140 (38-60)
- [x] 141 -200 (60-93)
- > 200 (>93)

pH
- <= 2
- 2.1 - 6.9
- 7 (Neutral)
- [x] 7.1 - 12.4
- >= 12.5

SPECIFIC GRAVITY
- < 0.8 (e.g. Gasoline)
- 0.8-1.0 (e.g. Ethanol)
- 1.0 (e.g. Water)
- [x] 1.0-1.2 (e.g. Antifreeze)
- > 1.2 (e.g. Methylene Chloride)

ASH
- [x] < 0.1
- 0.1 - 1.0
- 1.1 - 5.0
- 5.1 - 20.0
- > 20
- Unknown

BTU/LB (MJ/kg)
- < 2,000 (<4.6)
- 2,000-5,000 (4.6-11.6)
- [x] 5,000-10,000 (11.6-23.2)
- > 10,000 (>23.2)

Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	--	MAX	UOM
1,2,4-TRIMETHYLBENZENE	0.0000000	--	640.0000000	PPM
1,3,5-TRIMETHYLBENZENE	0.0000000	--	214.0000000	PPM
1-METHYLNAPHTHALENE	0.0000000	--	15300.0000000	PPM
2-METHYLNAPHTHALENE	0.0000000	--	22800.0000000	PPM
4-ISOPROPYLTOLUENE	0.0000000	--	72.0000000	PPM
ACENAPHTHENE	0.0000000	--	17200.0000000	PPM
ANTHRACENE	0.0000000	--	7580.0000000	PPM
ARSENIC	0.0000000	--	6.9700000	PPM
BENZ(A)ANTHRACENE	0.0000000	--	3670.0000000	PPM
BENZENE	10.0000000	--	1060.0000000	PPM

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? [ ] YES [x] NO

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? [ ] YES [x] NO

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? [ ] YES [x] NO

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. [x] NA [ ] YES [ ] NO

Chemical disinfection or some other form of sterilization has been applied to the waste. [x] NA [ ] YES [ ] NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS.	☑ NA	☐ YES	☐ NO
I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED.	☑ NA	☐ YES	☐ NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. ***G13***

SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. ***W205***

E. CONSTITUENTS

Are these values based on testing or knowledge? ☐ Knowledge ☑ Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0		*6.9700000*	*PPM*	
D005	BARIUM	100.0				☑
D006	CADMIUM	1.0				☑
D007	CHROMIUM	5.0				☑
D008	LEAD	5.0				☑
D009	MERCURY	0.2				☑
D010	SELENIUM	1.0				☑
D011	SILVER	5.0				☑
	VOLATILE COMPOUNDS					
D018	BENZENE	0.5	*1060.0000*			
D019	CARBON TETRACHLORIDE	0.5				
D021	CHLOROBENZENE	100.0				
D022	CHLOROFORM	6.0				
D028	1,2-DICHLOROETHANE	0.5				
D029	1,1-DICHLOROETHYLENE	0.7				
D035	METHYL ETHYL KETONE	200.0				
D039	TETRACHLOROETHYLENE	0.7				
D040	TRICHLOROETHYLENE	0.5				
D043	VINYL CHLORIDE	0.2				
	SEMI-VOLATILE COMPOUNDS					
D023	o-CRESOL	200.0				
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
	PESTICIDES AND HERBICIDES					
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			☑
CHLORINE			☑
FLUORINE			☑
IODINE			☑
SULFUR			☑
POTASSIUM			☑
SODIUM			☑
AMMONIA			☑
CYANIDE AMENABLE			☑
CYANIDE REACTIVE			☑
CYANIDE TOTAL			☑
SULFIDE REACTIVE			☑

HOCs

☑ NONE
< 1000 PPM
>= 1000 PPM

PCBs

☑ NONE
< 50 PPM
>=50 PPM

IF PCBS ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES ☑ NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

☐ YES ☑ NO (If yes, explain)

CHOOSE ALL THAT APPLY

DEA REGULATED SUBSTANCES	EXPLOSIVE	FUMING	☑ OSHA REGULATED CARCINOGENS
POLYMERIZABLE	RADIOACTIVE	REACTIVE MATERIAL	NONE OF THE ABOVE

F. REGULATORY STATUS

- ☐ YES ☑ NO USEPA HAZARDOUS WASTE?
- ☑ YES ☐ NO DO ANY STATE WASTE CODES APPLY?
  - ***X004***
  - Texas Waste Code
- ☐ YES ☑ NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?
- ☐ YES ☑ NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?
  - LDR CATEGORY: ***Subject to a variance or exemption***
  - VARIANCE INFO: ***40 CFR 261.24 excludes MGP waste from RCRA regs, however, the Generator requires this waste stream to be managed at a RCRA Permitted Subtitle C Facility.***
- ☐ YES ☑ NO IS THIS A UNIVERSAL WASTE?
- ☐ YES ☑ NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS A VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?
- ☐ YES ☑ NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?
- ☐ YES ☑ NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?
- ☐ YES ☑ NO IS THIS WASTE STREAM PROHIBITED FROM INCINERATION BASED ON THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?
- ☐ YES ☑ NO IS THIS WASTE STREAM "USED OIL" WHICH IS TO BE MANAGED UNDER 40 CFR PART 279 - STANDARDS FOR THE MANAGEMENT OF USED OIL?
- ☑ YES ☐ NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?
- ☐ YES ☑ NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?
- ☐ YES ☑ NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 76.6 KPA (11.1 PSIA)?
- ☑ YES ☐ NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?
- ☐ YES ☑ NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?

Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

- ☑ NA ☐ YES ☐ NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?
- ☐ YES ☑ NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?
- ☐ YES ☑ NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?

What is the TAB quantity for your facility? _____ Megagram/year (1 Mg = 2,200 lbs)

The basis for this determination is: Knowledge of the Waste Or Test Data ☐ Knowledge ☑ Testing

Describe the knowledge : _____

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

NA3082, HAZARDOUS WASTE, LIQUID, N.O.S., (PETROLEUM HYDROCARBONS, BENZENE), 9, PG III

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ONE TIME WEEKLY MONTHLY ☑ QUARTERLY YEARLY OTHER

☑ **CONTAINERIZED**

1-1 CONTAINERS/SHIPMENT

STORAGE CAPACITY: ***5***

CONTAINER TYPE:

PORTABLE TOTE TANK BOX|CARTON|CASE

CUBIC YARD BOX ☑ DRUM

OTHER:

DRUM SIZE: ***55***

BULK LIQUID

GALLONS/SHIPMENT: ***0 Min -0 Max*** GAL.

BULK SOLID

SHIPMENT UOM: TON YARD

TONS/YARDS/SHIPMENT: ***0 Min - 0 Max***

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

FB1 or FB2, Approve into ETW and Kimball

GENERATOR'S CERTIFICATION

I certify that I am authc ment as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge.I also certify that any samples submitted are al waste.If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to r

AUTHORIZ	NAME (PRINT)	TITLE	DATE
	Robert J. Wyatt	Director, Legacy Environmental Program	August 14, 2023

Addendum

D. COMPOSITION

CHEMICAL	MIN	--	MAX	UOM
BENZO(A)PYRENE	0.000000	--	3990.000000	PPM
BENZO(B)FLUORANTHENE	0.000000	--	3340.000000	PPM
BENZO(G,H,I)PERYLENE	0.000000	--	2570.000000	PPM
BENZO(K)FLUORANTHENE	0.000000	--	1210.000000	PPM
CARBAZOLE	0.000000	--	2200.000000	PPM
CHRYSENE	0.000000	--	4680.000000	PPM
DIBENZ(A,H)ANTHRACENE	0.000000	--	202.000000	PPM
DIBENZOFURAN	0.000000	--	1480.000000	PPM
ETHYLBENZENE	0.000000	--	1690.000000	PPM
FLUORANTHENE	0.000000	--	18300.0000000	PPM
FLUORENE	0.000000	--	9270.000000	PPM
INDENO (1,2,3-CD)PYRENE	0.000000	--	2130.000000	PPM
ISOPROPYLBENZENE	0.000000	--	158.000000	PPM
N-PROPYLBENZENE	0.000000	--	66.00000	PPM
NAPHTHALENE	2.000000	--	26200.0000000	PPM
PETROLEUM HYDROCARBONS	85.00000	--	95.00000	%
PYRENE	0.000000	--	21600.0000000	PPM
SEC-BUTYLBENZENE	0.000000	--	56.00000	PPM
WATER	5.000000	--	15.00000	%
XYLENE	0.000000	--	734.000000	PPM

F. REGULATORY STATUS

Attachment B
Laboratory Reports and Chain-of-Custody Documentation

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Wednesday, February 8, 2023

Ben Uhl
Anchor QEA, LLC
6720 SW Macadam Ave. Suite 125
Portland, OR 97219

RE: A3A0810 - Gasco-T-50 DNAPL - 000029-02.84 T-(01.001K)

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3A0810, which was received by the laboratory on 1/20/2023 at 11:40:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	0.8 degC	eceived 2/3/23@1	0.5 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-50-DNAPL-01202023	**A3A0810-01**	**Liquid**	**01/20/23 10:15**	**01/20/23 11:40**

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A0903**		**V-16**
Acetone	ND	1000	2000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Acrylonitrile	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Benzene	**1060**	10.0	20.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Bromobenzene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Bromochloromethane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Bromodichloromethane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Bromoform	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Bromomethane	ND	1000	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
2-Butanone (MEK)	ND	500	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
n-Butylbenzene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
sec-Butylbenzene	**56.0**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	**J**
tert-Butylbenzene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Carbon disulfide	ND	500	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Carbon tetrachloride	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Chlorobenzene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Chloroethane	ND	500	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Chloroform	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Chloromethane	ND	250	500	mg/kg	10000	01/25/23 19:59	5035A/8260D	
2-Chlorotoluene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
4-Chlorotoluene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Dibromochloromethane	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	250	500	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Dibromomethane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2-Dichlorobenzene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,3-Dichlorobenzene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,4-Dichlorobenzene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Dichlorodifluoromethane	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1-Dichloroethane	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1-Dichloroethene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
cis-1,2-Dichloroethene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
trans-1,2-Dichloroethene	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A0903**		**V-16**
1,2-Dichloropropane	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,3-Dichloropropane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
2,2-Dichloropropane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1-Dichloropropene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
cis-1,3-Dichloropropene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
trans-1,3-Dichloropropene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Ethylbenzene	**1690**	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Hexachlorobutadiene	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
2-Hexanone	ND	1000	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Isopropylbenzene	**158**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
4-Isopropyltoluene	**72.0**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	**J**
Methylene chloride	ND	500	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	500	1000	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
n-Propylbenzene	**66.0**	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Styrene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Tetrachloroethene (PCE)	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Toluene	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2,3-Trichlorobenzene	ND	250	500	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2,4-Trichlorobenzene	ND	250	500	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1,1-Trichloroethane	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,1,2-Trichloroethane	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Trichloroethene (TCE)	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Trichlorofluoromethane	ND	100	200	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2,3-Trichloropropane	ND	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,2,4-Trimethylbenzene	**640**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
1,3,5-Trimethylbenzene	**214**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Vinyl chloride	ND	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
m,p-Xylene	**347**	50.0	100	mg/kg	10000	01/25/23 19:59	5035A/8260D	
o-Xylene	**387**	25.0	50.0	mg/kg	10000	01/25/23 19:59	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*		*Limits: 80-120 %*	*1*	*01/25/23 19:59*	*5035A/8260D*	

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A0903**		**V-16**
Surrogate: Toluene-d8 (Surr)			*Recovery: 97 %*	*Limits: 80-120 %*	*1*	*01/25/23 19:59*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*01/25/23 19:59*	*5035A/8260D*	
T-50-DNAPL-01202023 (A3A0810-01RE1)				**Matrix: Liquid**		**Batch: 23A1004**		**V-16**
Naphthalene	**26200**	500	1000	mg/kg	50000	01/27/23 21:32	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*	*1*	*01/27/23 21:32*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*01/27/23 21:32*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*01/27/23 21:32*	*5035A/8260D*	

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503-718-2323
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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A1115**		**C-07**
Aroclor 1016	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1221	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1232	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1242	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1248	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1254	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Aroclor 1260	ND	0.385	0.769	mg/kg	1	02/01/23 15:28	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 89 %*		*Limits: 60-125 %*	*1*	*02/01/23 15:28*	*EPA 8082A*	

Apex Laboratories

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A1083**		
Acenaphthene	**17200**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Acenaphthylene	ND	808	808	mg/kg	100	01/30/23 16:46	EPA 8270E	R-02
Anthracene	**7580**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benz(a)anthracene	**3670**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benzo(a)pyrene	**3990**	57.7	115	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benzo(b)fluoranthene	**3340**	57.7	115	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benzo(k)fluoranthene	**1210**	57.7	115	mg/kg	100	01/30/23 16:46	EPA 8270E	**M-05**
Benzo(g,h,i)perylene	**2570**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Chrysene	**4680**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Dibenz(a,h)anthracene	**202**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Fluoranthene	**18300**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Fluorene	**9270**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**2130**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
1-Methylnaphthalene	**15300**	76.9	154	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Methylnaphthalene	**22800**	76.9	154	mg/kg	100	01/30/23 16:46	EPA 8270E	
Naphthalene	**23500**	76.9	154	mg/kg	100	01/30/23 16:46	EPA 8270E	
Pyrene	**21600**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Carbazole	**2200**	57.7	115	mg/kg	100	01/30/23 16:46	EPA 8270E	
Dibenzofuran	**1480**	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Chlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Chloro-3-methylphenol	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,4-Dichlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,4-Dimethylphenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,4-Dinitrophenol	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
4,6-Dinitro-2-methylphenol	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Methylphenol	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
3+4-Methylphenol(s)	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Nitrophenol	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Nitrophenol	ND	1730	1730	mg/kg	100	01/30/23 16:46	EPA 8270E	R-02
Pentachlorophenol (PCP)	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Phenol	ND	76.9	154	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,3,4,6-Tetrachlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,3,5,6-Tetrachlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	

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Darwin Thomas, Business Development Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A1083**		
2,4,5-Trichlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
Nitrobenzene	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,4,6-Trichlorophenol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
Bis(2-ethylhexyl)phthalate	ND	577	1150	mg/kg	100	01/30/23 16:46	EPA 8270E	
Butyl benzyl phthalate	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Diethylphthalate	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Dimethylphthalate	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Di-n-butylphthalate	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Di-n-octyl phthalate	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
N-Nitrosodimethylamine	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
N-Nitroso-di-n-propylamine	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
N-Nitrosodiphenylamine	ND	769	769	mg/kg	100	01/30/23 16:46	EPA 8270E	R-02
Bis(2-Chloroethoxy) methane	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Bis(2-Chloroethyl) ether	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,2'-Oxybis(1-Chloropropane)	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Hexachlorobenzene	ND	38.5	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
Hexachlorobutadiene	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Hexachlorocyclopentadiene	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
Hexachloroethane	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Chloronaphthalene	ND	76.9	76.9	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,2,4-Trichlorobenzene	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Bromophenyl phenyl ether	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Chlorophenyl phenyl ether	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Aniline	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Chloroaniline	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
2-Nitroaniline	ND	769	1540	mg/kg	100	01/30/23 16:46	EPA 8270E	
3-Nitroaniline	ND	769	1540	mg/kg	100	01/30/23 16:46	EPA 8270E	
4-Nitroaniline	ND	769	1540	mg/kg	100	01/30/23 16:46	EPA 8270E	
2,4-Dinitrotoluene	ND	923	923	mg/kg	100	01/30/23 16:46	EPA 8270E	R-02
2,6-Dinitrotoluene	ND	385	769	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benzoic acid	ND	4810	9620	mg/kg	100	01/30/23 16:46	EPA 8270E	
Benzyl alcohol	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
Isophorone	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**		**Batch: 23A1083**		
Azobenzene (1,2-DPH)	ND	192	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Bis(2-Ethylhexyl) adipate	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
3,3'-Dichlorobenzidine	ND	769	1540	mg/kg	100	01/30/23 16:46	EPA 8270E	Q-52
1,2-Dinitrobenzene	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,3-Dinitrobenzene	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,4-Dinitrobenzene	ND	962	1920	mg/kg	100	01/30/23 16:46	EPA 8270E	
Pyridine	ND	192	385	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,2-Dichlorobenzene	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,3-Dichlorobenzene	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
1,4-Dichlorobenzene	ND	96.2	192	mg/kg	100	01/30/23 16:46	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*110 %*	*Limits: 37-122 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*150 %*	*44-120 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*67 %*	*33-122 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*116 %*	*54-127 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*112 %*	*35-120 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
2,4,6-Tribromophenol (Surr)			*327 %*	*39-132 %*	*100*	*01/30/23 16:46*	*EPA 8270E*	*S-05*
T-50-DNAPL-01202023 (A3A0810-01RE1)				**Matrix: Liquid**		**Batch: 23A1083**		
Phenanthrene	**61800**	385	769	mg/kg	1000	01/30/23 17:55	EPA 8270E	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01RE1)				**Matrix: Liquid**				
Batch: 23A0958								
Arsenic	**6.97**	0.522	1.04	mg/kg	10	01/27/23 16:49	EPA 6020B	
Barium	ND	0.522	1.04	mg/kg	10	01/27/23 16:49	EPA 6020B	
Cadmium	ND	0.104	0.209	mg/kg	10	01/27/23 16:49	EPA 6020B	
Chromium	ND	0.522	1.04	mg/kg	10	01/27/23 16:49	EPA 6020B	
Lead	ND	0.104	0.209	mg/kg	10	01/27/23 16:49	EPA 6020B	
Mercury	ND	0.0418	0.0835	mg/kg	10	01/27/23 16:49	EPA 6020B	
Selenium	ND	0.522	1.04	mg/kg	10	01/27/23 16:49	EPA 6020B	
Silver	ND	0.104	0.209	mg/kg	10	01/27/23 16:49	EPA 6020B	

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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T-50-DNAPL-01202023 (A3A0810-01)				**Matrix: Liquid**				
Batch: 23A0930								
Liquid/Oil pH (measured in H2O)	**7.3**			pH Units	1	01/25/23 16:38	EPA 9045D	**pH_S**
pH Temperature (deg C)	**24.3**			pH Units	1	01/25/23 16:38	EPA 9045D	**pH_S**
Batch: 23B0160								
Flash Point (Ignitability)	>150° F	70	70	degF	1	02/03/23 17:37	EPA 1010M	

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Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Blank (23A0903-BLK1)			Prepared: 01/25/23 08:00 Analyzed: 01/25/23 11:54									
5035A/8260D												
Acetone	ND	0.500	1.00	mg/kg	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
Benzene	ND	0.00500	0.0100	mg/kg	50	---	---	---	---	---	---	
Bromobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Bromoform	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
Bromomethane	ND	0.500	0.500	mg/kg	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Chloroethane	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Chloroform	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Chloromethane	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

APEX LABORATORIES

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Blank (23A0903-BLK1)			Prepared: 01/25/23 08:00 Analyzed: 01/25/23 11:54									
1,2-Dichloropropane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
2-Hexanone	ND	0.500	0.500	mg/kg	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Methylene chloride	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Styrene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Toluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
o-Xylene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 105 %* *Limits: 80-120 %* *Dilution: 1x*

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ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Blank (23A0903-BLK1)				Prepared: 01/25/23 08:00 Analyzed: 01/25/23 11:54								
Surr: Toluene-d8 (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (23A0903-BS1)				Prepared: 01/25/23 08:00 Analyzed: 01/25/23 11:03								
5035A/8260D												
Acetone	1.83	0.500	1.00	mg/kg	50	2.00	---	91	80-120%	---	---	
Acrylonitrile	0.923	0.0500	0.100	mg/kg	50	1.00	---	92	80-120%	---	---	
Benzene	1.03	0.00500	0.0100	mg/kg	50	1.00	---	103	80-120%	---	---	
Bromobenzene	0.956	0.0125	0.0250	mg/kg	50	1.00	---	96	80-120%	---	---	
Bromochloromethane	1.04	0.0250	0.0500	mg/kg	50	1.00	---	104	80-120%	---	---	
Bromodichloromethane	1.05	0.0250	0.0500	mg/kg	50	1.00	---	105	80-120%	---	---	
Bromoform	0.951	0.0500	0.100	mg/kg	50	1.00	---	95	80-120%	---	---	
Bromomethane	1.94	0.500	0.500	mg/kg	50	1.00	---	**194**	**80-120%**	---	---	Q-56
2-Butanone (MEK)	1.78	0.250	0.500	mg/kg	50	2.00	---	89	80-120%	---	---	
n-Butylbenzene	0.874	0.0250	0.0500	mg/kg	50	1.00	---	87	80-120%	---	---	
sec-Butylbenzene	0.908	0.0250	0.0500	mg/kg	50	1.00	---	91	80-120%	---	---	
tert-Butylbenzene	0.869	0.0250	0.0500	mg/kg	50	1.00	---	87	80-120%	---	---	
Carbon disulfide	0.932	0.250	0.500	mg/kg	50	1.00	---	93	80-120%	---	---	
Carbon tetrachloride	1.06	0.0250	0.0500	mg/kg	50	1.00	---	106	80-120%	---	---	
Chlorobenzene	1.00	0.0125	0.0250	mg/kg	50	1.00	---	100	80-120%	---	---	
Chloroethane	1.29	0.250	0.500	mg/kg	50	1.00	---	**129**	**80-120%**	---	---	Q-56
Chloroform	1.09	0.0250	0.0500	mg/kg	50	1.00	---	109	80-120%	---	---	
Chloromethane	0.844	0.125	0.250	mg/kg	50	1.00	---	84	80-120%	---	---	
2-Chlorotoluene	0.944	0.0250	0.0500	mg/kg	50	1.00	---	94	80-120%	---	---	
4-Chlorotoluene	0.913	0.0250	0.0500	mg/kg	50	1.00	---	91	80-120%	---	---	
Dibromochloromethane	0.946	0.0500	0.100	mg/kg	50	1.00	---	95	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.854	0.125	0.250	mg/kg	50	1.00	---	85	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.02	0.0250	0.0500	mg/kg	50	1.00	---	102	80-120%	---	---	
Dibromomethane	1.11	0.0250	0.0500	mg/kg	50	1.00	---	111	80-120%	---	---	
1,2-Dichlorobenzene	0.954	0.0125	0.0250	mg/kg	50	1.00	---	95	80-120%	---	---	
1,3-Dichlorobenzene	0.984	0.0125	0.0250	mg/kg	50	1.00	---	98	80-120%	---	---	
1,4-Dichlorobenzene	0.956	0.0125	0.0250	mg/kg	50	1.00	---	96	80-120%	---	---	
Dichlorodifluoromethane	0.860	0.0500	0.100	mg/kg	50	1.00	---	86	80-120%	---	---	
1,1-Dichloroethane	1.09	0.0125	0.0250	mg/kg	50	1.00	---	109	80-120%	---	---	

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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
LCS (23A0903-BS1)			Prepared: 01/25/23 08:00		Analyzed: 01/25/23 11:03							
1,2-Dichloroethane (EDC)	1.09	0.0125	0.0250	mg/kg	50	1.00	---	109	80-120%	---	---	
1,1-Dichloroethene	1.05	0.0125	0.0250	mg/kg	50	1.00	---	105	80-120%	---	---	
cis-1,2-Dichloroethene	1.05	0.0125	0.0250	mg/kg	50	1.00	---	105	80-120%	---	---	
trans-1,2-Dichloroethene	1.07	0.0125	0.0250	mg/kg	50	1.00	---	107	80-120%	---	---	
1,2-Dichloropropane	1.07	0.0125	0.0250	mg/kg	50	1.00	---	107	80-120%	---	---	
1,3-Dichloropropane	0.964	0.0250	0.0500	mg/kg	50	1.00	---	96	80-120%	---	---	
2,2-Dichloropropane	1.11	0.0250	0.0500	mg/kg	50	1.00	---	111	80-120%	---	---	
1,1-Dichloropropene	0.985	0.0250	0.0500	mg/kg	50	1.00	---	98	80-120%	---	---	
cis-1,3-Dichloropropene	0.940	0.0250	0.0500	mg/kg	50	1.00	---	94	80-120%	---	---	
trans-1,3-Dichloropropene	1.03	0.0250	0.0500	mg/kg	50	1.00	---	103	80-120%	---	---	
Ethylbenzene	0.977	0.0125	0.0250	mg/kg	50	1.00	---	98	80-120%	---	---	
Hexachlorobutadiene	0.870	0.0500	0.100	mg/kg	50	1.00	---	87	80-120%	---	---	
2-Hexanone	1.56	0.500	0.500	mg/kg	50	2.00	---	**78**	**80-120%**	---	---	Q-55
Isopropylbenzene	0.903	0.0250	0.0500	mg/kg	50	1.00	---	90	80-120%	---	---	
4-Isopropyltoluene	0.903	0.0250	0.0500	mg/kg	50	1.00	---	90	80-120%	---	---	
Methylene chloride	1.02	0.250	0.500	mg/kg	50	1.00	---	102	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.68	0.250	0.500	mg/kg	50	2.00	---	84	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.981	0.0250	0.0500	mg/kg	50	1.00	---	98	80-120%	---	---	
Naphthalene	0.861	0.0500	0.100	mg/kg	50	1.00	---	86	80-120%	---	---	
n-Propylbenzene	0.944	0.0125	0.0250	mg/kg	50	1.00	---	94	80-120%	---	---	
Styrene	0.877	0.0250	0.0500	mg/kg	50	1.00	---	88	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.04	0.0125	0.0250	mg/kg	50	1.00	---	104	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.923	0.0250	0.0500	mg/kg	50	1.00	---	92	80-120%	---	---	
Tetrachloroethene (PCE)	1.07	0.0125	0.0250	mg/kg	50	1.00	---	107	80-120%	---	---	
Toluene	0.978	0.0250	0.0500	mg/kg	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	0.952	0.125	0.250	mg/kg	50	1.00	---	95	80-120%	---	---	
1,2,4-Trichlorobenzene	0.889	0.125	0.250	mg/kg	50	1.00	---	89	80-120%	---	---	
1,1,1-Trichloroethane	1.07	0.0125	0.0250	mg/kg	50	1.00	---	107	80-120%	---	---	
1,1,2-Trichloroethane	0.990	0.0125	0.0250	mg/kg	50	1.00	---	99	80-120%	---	---	
Trichloroethene (TCE)	1.12	0.0125	0.0250	mg/kg	50	1.00	---	112	80-120%	---	---	
Trichlorofluoromethane	1.15	0.0500	0.100	mg/kg	50	1.00	---	115	80-120%	---	---	
1,2,3-Trichloropropane	0.958	0.0250	0.0500	mg/kg	50	1.00	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	0.960	0.0250	0.0500	mg/kg	50	1.00	---	96	80-120%	---	---	
1,3,5-Trimethylbenzene	0.981	0.0250	0.0500	mg/kg	50	1.00	---	98	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
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ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
LCS (23A0903-BS1)			Prepared: 01/25/23 08:00		Analyzed: 01/25/23 11:03							
Vinyl chloride	1.43	0.0125	0.0250	mg/kg	50	1.00	---	**143**	**80-120%**	---	---	Q-56
m,p-Xylene	1.96	0.0250	0.0500	mg/kg	50	2.00	---	98	80-120%	---	---	
o-Xylene	0.900	0.0125	0.0250	mg/kg	50	1.00	---	90	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*98 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*96 %*		*79-120 %*				*"*			
Duplicate (23A0903-DUP1)			Prepared: 01/24/23 14:11		Analyzed: 01/25/23 12:45							**V-15**
QC Source Sample: Non-SDG (A3A0800-01)												
Acetone	ND	0.488	0.975	mg/kg	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
Benzene	ND	0.00488	0.00975	mg/kg	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.488	0.488	mg/kg	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.244	0.488	mg/kg	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.244	0.488	mg/kg	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.244	0.488	mg/kg	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Chloromethane	ND	0.122	0.244	mg/kg	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.122	0.244	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	

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6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Duplicate (23A0903-DUP1)			Prepared: 01/24/23 14:11		Analyzed: 01/25/23 12:45							**V-15**
QC Source Sample: Non-SDG (A3A0800-01)												
1,3-Dichlorobenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.488	0.488	mg/kg	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.244	0.488	mg/kg	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.244	0.488	mg/kg	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Styrene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Toluene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.122	0.244	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.122	0.244	mg/kg	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Duplicate (23A0903-DUP1)			Prepared: 01/24/23 14:11		Analyzed: 01/25/23 12:45							**V-15**
QC Source Sample: Non-SDG (A3A0800-01)												
Trichloroethene (TCE)	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0488	0.0975	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0244	0.0488	mg/kg	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0122	0.0244	mg/kg	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*98 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*		*"*					
Duplicate (23A0903-DUP2)			Prepared: 01/24/23 17:26		Analyzed: 01/25/23 17:00							**V-15**
QC Source Sample: Non-SDG (A3A0822-01)												
Acetone	ND	0.578	1.16	mg/kg	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
Benzene	ND	0.00578	0.0116	mg/kg	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.578	0.578	mg/kg	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.289	0.578	mg/kg	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.202	0.202	mg/kg	50	---	ND	---	---	---	30%	R-02
sec-Butylbenzene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.289	0.578	mg/kg	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.289	0.578	mg/kg	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Chloromethane	ND	0.145	0.289	mg/kg	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	

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Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Duplicate (23A0903-DUP2)			Prepared: 01/24/23 17:26		Analyzed: 01/25/23 17:00							**V-15**
QC Source Sample: Non-SDG (A3A0822-01)												
4-Chlorotoluene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.145	0.289	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.578	0.578	mg/kg	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.289	0.578	mg/kg	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.289	0.578	mg/kg	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.173	0.173	mg/kg	50	---	ND	---	---	---	30%	R-02
n-Propylbenzene	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Styrene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Duplicate (23A0903-DUP2)			Prepared: 01/24/23 17:26		Analyzed: 01/25/23 17:00							**V-15**
QC Source Sample: Non-SDG (A3A0822-01)												
Tetrachloroethene (PCE)	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Toluene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.145	0.289	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.145	0.289	mg/kg	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0578	0.116	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	**0.405**	0.0289	0.0578	mg/kg	50	---	0.410	---	---	1	30%	
Vinyl chloride	ND	0.0145	0.0289	mg/kg	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0289	0.0578	mg/kg	50	---	ND	---	---	---	30%	
o-Xylene	**0.0231**	0.0145	0.0289	mg/kg	50	---	0.0226	---	---	3	30%	J
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*				*"*			
Matrix Spike (23A0903-MS1)			Prepared: 01/24/23 12:20		Analyzed: 01/25/23 18:17							
QC Source Sample: Non-SDG (A3A0808-01)												
5035A/8260D												
Acetone	2.05	0.535	1.07	mg/kg	50	2.14	ND	96	36-164%	---	---	
Acrylonitrile	1.05	0.0535	0.107	mg/kg	50	1.07	ND	98	65-134%	---	---	
Benzene	1.16	0.00535	0.0107	mg/kg	50	1.07	ND	108	77-121%	---	---	
Bromobenzene	1.09	0.0134	0.0267	mg/kg	50	1.07	ND	102	78-121%	---	---	
Bromochloromethane	1.17	0.0267	0.0535	mg/kg	50	1.07	ND	109	78-125%	---	---	
Bromodichloromethane	1.18	0.0267	0.0535	mg/kg	50	1.07	ND	111	75-127%	---	---	
Bromoform	1.08	0.0535	0.107	mg/kg	50	1.07	ND	101	67-132%	---	---	
Bromomethane	2.27	0.535	0.535	mg/kg	50	1.07	ND	**212**	**53-143%**	---	---	Q-54d
2-Butanone (MEK)	1.90	0.267	0.535	mg/kg	50	2.14	ND	89	51-148%	---	---	
n-Butylbenzene	1.02	0.0267	0.0535	mg/kg	50	1.07	ND	95	70-128%	---	---	
sec-Butylbenzene	1.07	0.0267	0.0535	mg/kg	50	1.07	ND	100	73-126%	---	---	
tert-Butylbenzene	0.994	0.0267	0.0535	mg/kg	50	1.07	ND	93	73-125%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							Soil					
Matrix Spike (23A0903-MS1)			Prepared: 01/24/23 12:20 Analyzed: 01/25/23 18:17									
QC Source Sample: Non-SDG (A3A0808-01)												
Carbon disulfide	1.13	0.267	0.535	mg/kg	50	1.07	ND	105	63-132%	---	---	
Carbon tetrachloride	1.23	0.0267	0.0535	mg/kg	50	1.07	ND	115	70-135%	---	---	
Chlorobenzene	1.11	0.0134	0.0267	mg/kg	50	1.07	ND	104	79-120%	---	---	
Chloroethane	1.51	0.267	0.535	mg/kg	50	1.07	ND	**141**	**59-139%**	---	---	Q-54e
Chloroform	1.22	0.0267	0.0535	mg/kg	50	1.07	ND	114	78-123%	---	---	
Chloromethane	0.979	0.134	0.267	mg/kg	50	1.07	ND	92	50-136%	---	---	
2-Chlorotoluene	1.04	0.0267	0.0535	mg/kg	50	1.07	ND	98	75-122%	---	---	
4-Chlorotoluene	1.02	0.0267	0.0535	mg/kg	50	1.07	ND	96	72-124%	---	---	
Dibromochloromethane	1.07	0.0535	0.107	mg/kg	50	1.07	ND	100	74-126%	---	---	
1,2-Dibromo-3-chloropropane	0.975	0.134	0.267	mg/kg	50	1.07	ND	91	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.12	0.0267	0.0535	mg/kg	50	1.07	ND	105	78-122%	---	---	
Dibromomethane	1.21	0.0267	0.0535	mg/kg	50	1.07	ND	113	78-125%	---	---	
1,2-Dichlorobenzene	1.05	0.0134	0.0267	mg/kg	50	1.07	ND	98	78-121%	---	---	
1,3-Dichlorobenzene	1.08	0.0134	0.0267	mg/kg	50	1.07	ND	101	77-121%	---	---	
1,4-Dichlorobenzene	1.05	0.0134	0.0267	mg/kg	50	1.07	ND	98	75-120%	---	---	
Dichlorodifluoromethane	1.04	0.0535	0.107	mg/kg	50	1.07	ND	97	29-149%	---	---	
1,1-Dichloroethane	1.23	0.0134	0.0267	mg/kg	50	1.07	ND	115	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.18	0.0134	0.0267	mg/kg	50	1.07	ND	111	73-128%	---	---	
1,1-Dichloroethene	1.26	0.0134	0.0267	mg/kg	50	1.07	ND	117	70-131%	---	---	
cis-1,2-Dichloroethene	1.18	0.0134	0.0267	mg/kg	50	1.07	ND	110	77-123%	---	---	
trans-1,2-Dichloroethene	1.19	0.0134	0.0267	mg/kg	50	1.07	ND	111	74-125%	---	---	
1,2-Dichloropropane	1.18	0.0134	0.0267	mg/kg	50	1.07	ND	110	76-123%	---	---	
1,3-Dichloropropane	1.06	0.0267	0.0535	mg/kg	50	1.07	ND	99	77-121%	---	---	
2,2-Dichloropropane	1.15	0.0267	0.0535	mg/kg	50	1.07	ND	108	67-133%	---	---	
1,1-Dichloropropene	1.13	0.0267	0.0535	mg/kg	50	1.07	ND	106	76-125%	---	---	
cis-1,3-Dichloropropene	1.02	0.0267	0.0535	mg/kg	50	1.07	ND	96	74-126%	---	---	
trans-1,3-Dichloropropene	1.10	0.0267	0.0535	mg/kg	50	1.07	ND	103	71-130%	---	---	
Ethylbenzene	1.09	0.0134	0.0267	mg/kg	50	1.07	ND	102	76-122%	---	---	
Hexachlorobutadiene	1.19	0.0535	0.107	mg/kg	50	1.07	ND	112	61-135%	---	---	
2-Hexanone	1.73	0.535	0.535	mg/kg	50	2.14	ND	81	53-145%	---	---	Q-54h
Isopropylbenzene	1.03	0.0267	0.0535	mg/kg	50	1.07	ND	97	68-134%	---	---	
4-Isopropyltoluene	1.04	0.0267	0.0535	mg/kg	50	1.07	ND	97	73-127%	---	---	
Methylene chloride	1.12	0.267	0.535	mg/kg	50	1.07	ND	104	70-128%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0903 - EPA 5035A							**Soil**					
Matrix Spike (23A0903-MS1)			Prepared: 01/24/23 12:20 Analyzed: 01/25/23 18:17									
QC Source Sample: Non-SDG (A3A0808-01)												
4-Methyl-2-pentanone (MiBK)	1.89	0.267	0.535	mg/kg	50	2.14	ND	88	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.07	0.0267	0.0535	mg/kg	50	1.07	ND	100	73-125%	---	---	
Naphthalene	0.978	0.0535	0.107	mg/kg	50	1.07	ND	91	62-129%	---	---	
n-Propylbenzene	1.06	0.0134	0.0267	mg/kg	50	1.07	ND	99	73-125%	---	---	
Styrene	0.992	0.0267	0.0535	mg/kg	50	1.07	ND	93	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.17	0.0134	0.0267	mg/kg	50	1.07	ND	109	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.01	0.0267	0.0535	mg/kg	50	1.07	ND	95	70-124%	---	---	
Tetrachloroethene (PCE)	1.21	0.0134	0.0267	mg/kg	50	1.07	ND	113	73-128%	---	---	
Toluene	1.08	0.0267	0.0535	mg/kg	50	1.07	ND	101	77-121%	---	---	
1,2,3-Trichlorobenzene	1.06	0.134	0.267	mg/kg	50	1.07	ND	99	66-130%	---	---	
1,2,4-Trichlorobenzene	1.00	0.134	0.267	mg/kg	50	1.07	ND	93	67-129%	---	---	
1,1,1-Trichloroethane	1.23	0.0134	0.0267	mg/kg	50	1.07	ND	115	73-130%	---	---	
1,1,2-Trichloroethane	1.09	0.0134	0.0267	mg/kg	50	1.07	ND	102	78-121%	---	---	
Trichloroethene (TCE)	1.26	0.0134	0.0267	mg/kg	50	1.07	ND	118	77-123%	---	---	
Trichlorofluoromethane	1.63	0.0535	0.107	mg/kg	50	1.07	ND	**152**	**62-140%**	---	---	Q-01
1,2,3-Trichloropropane	1.03	0.0267	0.0535	mg/kg	50	1.07	ND	97	73-125%	---	---	
1,2,4-Trimethylbenzene	1.09	0.0267	0.0535	mg/kg	50	1.07	ND	102	75-123%	---	---	
1,3,5-Trimethylbenzene	1.11	0.0267	0.0535	mg/kg	50	1.07	ND	104	73-124%	---	---	
Vinyl chloride	1.69	0.0134	0.0267	mg/kg	50	1.07	ND	**158**	**56-135%**	---	---	Q-54a
m,p-Xylene	2.19	0.0267	0.0535	mg/kg	50	2.14	ND	102	77-124%	---	---	
o-Xylene	1.01	0.0134	0.0267	mg/kg	50	1.07	ND	95	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*			*"*				

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Blank (23A1004-BLK1)			Prepared: 01/27/23 08:00 Analyzed: 01/27/23 12:37									
5035A/8260D												
Acetone	ND	0.500	1.00	mg/kg	50	---	---	---	---	---	---	
Acrylonitrile	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
Benzene	ND	0.00500	0.0100	mg/kg	50	---	---	---	---	---	---	
Bromobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Bromochloromethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Bromodichloromethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Bromoform	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
Bromomethane	ND	0.500	0.500	mg/kg	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
n-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Carbon disulfide	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Chlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Chloroethane	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Chloroform	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Chloromethane	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Dibromochloromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Dibromomethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Blank (23A1004-BLK1)			Prepared: 01/27/23 08:00 Analyzed: 01/27/23 12:37									
1,2-Dichloropropane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Ethylbenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
2-Hexanone	ND	0.500	0.500	mg/kg	50	---	---	---	---	---	---	
Isopropylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Methylene chloride	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	0.250	0.500	mg/kg	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Naphthalene	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
n-Propylbenzene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Styrene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Toluene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.125	0.250	mg/kg	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	0.0500	0.100	mg/kg	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
Vinyl chloride	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	
m,p-Xylene	ND	0.0250	0.0500	mg/kg	50	---	---	---	---	---	---	
o-Xylene	ND	0.0125	0.0250	mg/kg	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 105 %* *Limits: 80-120 %* *Dilution: 1x*

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Blank (23A1004-BLK1)				Prepared: 01/27/23 08:00 Analyzed: 01/27/23 12:37								
Surr: Toluene-d8 (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (23A1004-BS1)				Prepared: 01/27/23 08:00 Analyzed: 01/27/23 11:46								
5035A/8260D												
Acetone	1.89	0.500	1.00	mg/kg	50	2.00	---	95	80-120%	---	---	
Acrylonitrile	0.989	0.0500	0.100	mg/kg	50	1.00	---	99	80-120%	---	---	
Benzene	1.07	0.00500	0.0100	mg/kg	50	1.00	---	107	80-120%	---	---	
Bromobenzene	0.964	0.0125	0.0250	mg/kg	50	1.00	---	96	80-120%	---	---	
Bromochloromethane	1.14	0.0250	0.0500	mg/kg	50	1.00	---	114	80-120%	---	---	
Bromodichloromethane	1.10	0.0250	0.0500	mg/kg	50	1.00	---	110	80-120%	---	---	
Bromoform	0.980	0.0500	0.100	mg/kg	50	1.00	---	98	80-120%	---	---	
Bromomethane	2.16	0.500	0.500	mg/kg	50	1.00	---	**216**	**80-120%**	---	---	Q-56
2-Butanone (MEK)	1.90	0.250	0.500	mg/kg	50	2.00	---	95	80-120%	---	---	
n-Butylbenzene	0.869	0.0250	0.0500	mg/kg	50	1.00	---	87	80-120%	---	---	
sec-Butylbenzene	0.926	0.0250	0.0500	mg/kg	50	1.00	---	93	80-120%	---	---	
tert-Butylbenzene	0.864	0.0250	0.0500	mg/kg	50	1.00	---	86	80-120%	---	---	
Carbon disulfide	1.01	0.250	0.500	mg/kg	50	1.00	---	101	80-120%	---	---	
Carbon tetrachloride	1.09	0.0250	0.0500	mg/kg	50	1.00	---	109	80-120%	---	---	
Chlorobenzene	1.01	0.0125	0.0250	mg/kg	50	1.00	---	101	80-120%	---	---	
Chloroethane	1.42	0.250	0.500	mg/kg	50	1.00	---	**142**	**80-120%**	---	---	Q-56
Chloroform	1.14	0.0250	0.0500	mg/kg	50	1.00	---	114	80-120%	---	---	
Chloromethane	0.928	0.125	0.250	mg/kg	50	1.00	---	93	80-120%	---	---	
2-Chlorotoluene	0.922	0.0250	0.0500	mg/kg	50	1.00	---	92	80-120%	---	---	
4-Chlorotoluene	0.916	0.0250	0.0500	mg/kg	50	1.00	---	92	80-120%	---	---	
Dibromochloromethane	0.969	0.0500	0.100	mg/kg	50	1.00	---	97	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.815	0.125	0.250	mg/kg	50	1.00	---	81	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.01	0.0250	0.0500	mg/kg	50	1.00	---	101	80-120%	---	---	
Dibromomethane	1.15	0.0250	0.0500	mg/kg	50	1.00	---	115	80-120%	---	---	
1,2-Dichlorobenzene	0.965	0.0125	0.0250	mg/kg	50	1.00	---	96	80-120%	---	---	
1,3-Dichlorobenzene	0.966	0.0125	0.0250	mg/kg	50	1.00	---	97	80-120%	---	---	
1,4-Dichlorobenzene	0.946	0.0125	0.0250	mg/kg	50	1.00	---	95	80-120%	---	---	
Dichlorodifluoromethane	0.902	0.0500	0.100	mg/kg	50	1.00	---	90	80-120%	---	---	
1,1-Dichloroethane	1.16	0.0125	0.0250	mg/kg	50	1.00	---	116	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							Soil					
LCS (23A1004-BS1)			Prepared: 01/27/23 08:00 Analyzed: 01/27/23 11:46									
1,2-Dichloroethane (EDC)	1.15	0.0125	0.0250	mg/kg	50	1.00	---	115	80-120%	---	---	
1,1-Dichloroethene	1.14	0.0125	0.0250	mg/kg	50	1.00	---	114	80-120%	---	---	
cis-1,2-Dichloroethene	1.10	0.0125	0.0250	mg/kg	50	1.00	---	110	80-120%	---	---	
trans-1,2-Dichloroethene	1.12	0.0125	0.0250	mg/kg	50	1.00	---	112	80-120%	---	---	
1,2-Dichloropropane	1.10	0.0125	0.0250	mg/kg	50	1.00	---	110	80-120%	---	---	
1,3-Dichloropropane	0.973	0.0250	0.0500	mg/kg	50	1.00	---	97	80-120%	---	---	
2,2-Dichloropropane	1.08	0.0250	0.0500	mg/kg	50	1.00	---	108	80-120%	---	---	
1,1-Dichloropropene	1.01	0.0250	0.0500	mg/kg	50	1.00	---	101	80-120%	---	---	
cis-1,3-Dichloropropene	0.916	0.0250	0.0500	mg/kg	50	1.00	---	92	80-120%	---	---	
trans-1,3-Dichloropropene	1.04	0.0250	0.0500	mg/kg	50	1.00	---	104	80-120%	---	---	
Ethylbenzene	0.990	0.0125	0.0250	mg/kg	50	1.00	---	99	80-120%	---	---	
Hexachlorobutadiene	0.868	0.0500	0.100	mg/kg	50	1.00	---	87	80-120%	---	---	
2-Hexanone	1.59	0.500	0.500	mg/kg	50	2.00	---	**79**	**80-120%**	---	---	Q-55
Isopropylbenzene	0.900	0.0250	0.0500	mg/kg	50	1.00	---	90	80-120%	---	---	
4-Isopropyltoluene	0.890	0.0250	0.0500	mg/kg	50	1.00	---	89	80-120%	---	---	
Methylene chloride	1.07	0.250	0.500	mg/kg	50	1.00	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.77	0.250	0.500	mg/kg	50	2.00	---	88	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.998	0.0250	0.0500	mg/kg	50	1.00	---	100	80-120%	---	---	
Naphthalene	0.817	0.0500	0.100	mg/kg	50	1.00	---	82	80-120%	---	---	
n-Propylbenzene	0.946	0.0125	0.0250	mg/kg	50	1.00	---	95	80-120%	---	---	
Styrene	0.878	0.0250	0.0500	mg/kg	50	1.00	---	88	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.05	0.0125	0.0250	mg/kg	50	1.00	---	105	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.942	0.0250	0.0500	mg/kg	50	1.00	---	94	80-120%	---	---	
Tetrachloroethene (PCE)	1.06	0.0125	0.0250	mg/kg	50	1.00	---	106	80-120%	---	---	
Toluene	0.992	0.0250	0.0500	mg/kg	50	1.00	---	99	80-120%	---	---	
1,2,3-Trichlorobenzene	0.928	0.125	0.250	mg/kg	50	1.00	---	93	80-120%	---	---	
1,2,4-Trichlorobenzene	0.831	0.125	0.250	mg/kg	50	1.00	---	83	80-120%	---	---	
1,1,1-Trichloroethane	1.12	0.0125	0.0250	mg/kg	50	1.00	---	112	80-120%	---	---	
1,1,2-Trichloroethane	1.01	0.0125	0.0250	mg/kg	50	1.00	---	101	80-120%	---	---	
Trichloroethene (TCE)	1.15	0.0125	0.0250	mg/kg	50	1.00	---	115	80-120%	---	---	
Trichlorofluoromethane	1.46	0.0500	0.100	mg/kg	50	1.00	---	**146**	**80-120%**	---	---	Q-56
1,2,3-Trichloropropane	0.962	0.0250	0.0500	mg/kg	50	1.00	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	0.966	0.0250	0.0500	mg/kg	50	1.00	---	97	80-120%	---	---	
1,3,5-Trimethylbenzene	0.979	0.0250	0.0500	mg/kg	50	1.00	---	98	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
LCS (23A1004-BS1)			Prepared: 01/27/23 08:00 Analyzed: 01/27/23 11:46									
Vinyl chloride	1.66	0.0125	0.0250	mg/kg	50	1.00	---	**166**	**80-120%**	---	---	Q-56
m,p-Xylene	2.00	0.0250	0.0500	mg/kg	50	2.00	---	100	80-120%	---	---	
o-Xylene	0.896	0.0125	0.0250	mg/kg	50	1.00	---	90	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*98 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*95 %*		*79-120 %*				*"*			
Duplicate (23A1004-DUP1)			Prepared: 01/25/23 11:05 Analyzed: 01/27/23 13:28									
QC Source Sample: Non-SDG (A3A0906-01)												
Acetone	ND	0.526	1.05	mg/kg	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
Benzene	ND	0.00526	0.0105	mg/kg	50	---	ND	---	---	---	30%	
Bromobenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Bromoform	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
Bromomethane	ND	0.526	0.526	mg/kg	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	0.263	0.526	mg/kg	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	0.263	0.526	mg/kg	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Chloroethane	ND	0.263	0.526	mg/kg	50	---	ND	---	---	---	30%	
Chloroform	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Chloromethane	ND	0.132	0.263	mg/kg	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	0.132	0.263	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Dibromomethane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Duplicate (23A1004-DUP1)			Prepared: 01/25/23 11:05 Analyzed: 01/27/23 13:28									
QC Source Sample: Non-SDG (A3A0906-01)												
1,3-Dichlorobenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
2-Hexanone	ND	0.526	0.526	mg/kg	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Methylene chloride	ND	0.263	0.526	mg/kg	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	0.263	0.526	mg/kg	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Naphthalene	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Styrene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	**0.0936**	0.0132	0.0263	mg/kg	50	---	0.103	---	---	9	30%	
Toluene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	0.132	0.263	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	0.132	0.263	mg/kg	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Duplicate (23A1004-DUP1)			Prepared: 01/25/23 11:05 Analyzed: 01/27/23 13:28									
QC Source Sample: Non-SDG (A3A0906-01)												
Trichloroethene (TCE)	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	0.0526	0.105	mg/kg	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.0263	0.0526	mg/kg	50	---	ND	---	---	---	30%	
o-Xylene	ND	0.0132	0.0263	mg/kg	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*98 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*				*"*			
Matrix Spike (23A1004-MS1)			Prepared: 01/20/23 00:00 Analyzed: 01/27/23 18:08									
QC Source Sample: Non-SDG (A3A0750-01)												
5035A/8260D												
Acetone	2.04	0.519	1.04	mg/kg	50	2.08	ND	98	36-164%	---	---	
Acrylonitrile	1.01	0.0519	0.104	mg/kg	50	1.04	ND	97	65-134%	---	---	
Benzene	1.09	0.00519	0.0104	mg/kg	50	1.04	ND	105	77-121%	---	---	
Bromobenzene	1.01	0.0130	0.0260	mg/kg	50	1.04	ND	98	78-121%	---	---	
Bromochloromethane	1.10	0.0260	0.0519	mg/kg	50	1.04	ND	106	78-125%	---	---	
Bromodichloromethane	1.10	0.0260	0.0519	mg/kg	50	1.04	ND	106	75-127%	---	---	
Bromoform	0.984	0.0519	0.104	mg/kg	50	1.04	ND	95	67-132%	---	---	
Bromomethane	2.18	0.519	0.519	mg/kg	50	1.04	ND	**210**	**53-143%**	---	---	Q-54f
2-Butanone (MEK)	1.91	0.260	0.519	mg/kg	50	2.08	ND	92	51-148%	---	---	
n-Butylbenzene	1.26	0.0260	0.0519	mg/kg	50	1.04	0.157	106	70-128%	---	---	
sec-Butylbenzene	1.10	0.0260	0.0519	mg/kg	50	1.04	0.0519	101	73-126%	---	---	
tert-Butylbenzene	0.975	0.0260	0.0519	mg/kg	50	1.04	ND	94	73-125%	---	---	
Carbon disulfide	1.02	0.260	0.519	mg/kg	50	1.04	ND	98	63-132%	---	---	
Carbon tetrachloride	1.13	0.0260	0.0519	mg/kg	50	1.04	ND	109	70-135%	---	---	
Chlorobenzene	1.04	0.0130	0.0260	mg/kg	50	1.04	ND	100	79-120%	---	---	
Chloroethane	1.29	0.260	0.519	mg/kg	50	1.04	ND	124	59-139%	---	---	Q-54
Chloroform	1.15	0.0260	0.0519	mg/kg	50	1.04	ND	111	78-123%	---	---	
Chloromethane	0.915	0.130	0.260	mg/kg	50	1.04	ND	88	50-136%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							Soil					
Matrix Spike (23A1004-MS1)			Prepared: 01/20/23 00:00		Analyzed: 01/27/23 18:08							
QC Source Sample: Non-SDG (A3A0750-01)												
2-Chlorotoluene	1.03	0.0260	0.0519	mg/kg	50	1.04	ND	99	75-122%	---	---	
4-Chlorotoluene	0.958	0.0260	0.0519	mg/kg	50	1.04	ND	92	72-124%	---	---	
Dibromochloromethane	0.973	0.0519	0.104	mg/kg	50	1.04	ND	94	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1.02	0.130	0.260	mg/kg	50	1.04	ND	98	61-132%	---	---	
1,2-Dibromoethane (EDB)	1.05	0.0260	0.0519	mg/kg	50	1.04	ND	101	78-122%	---	---	
Dibromomethane	1.14	0.0260	0.0519	mg/kg	50	1.04	ND	110	78-125%	---	---	
1,2-Dichlorobenzene	1.03	0.0130	0.0260	mg/kg	50	1.04	ND	99	78-121%	---	---	
1,3-Dichlorobenzene	1.03	0.0130	0.0260	mg/kg	50	1.04	ND	99	77-121%	---	---	
1,4-Dichlorobenzene	0.999	0.0130	0.0260	mg/kg	50	1.04	ND	96	75-120%	---	---	
Dichlorodifluoromethane	0.929	0.0519	0.104	mg/kg	50	1.04	ND	89	29-149%	---	---	
1,1-Dichloroethane	1.15	0.0130	0.0260	mg/kg	50	1.04	ND	111	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.13	0.0130	0.0260	mg/kg	50	1.04	ND	109	73-128%	---	---	
1,1-Dichloroethene	1.15	0.0130	0.0260	mg/kg	50	1.04	ND	111	70-131%	---	---	
cis-1,2-Dichloroethene	1.10	0.0130	0.0260	mg/kg	50	1.04	ND	106	77-123%	---	---	
trans-1,2-Dichloroethene	1.13	0.0130	0.0260	mg/kg	50	1.04	ND	109	74-125%	---	---	
1,2-Dichloropropane	1.10	0.0130	0.0260	mg/kg	50	1.04	ND	106	76-123%	---	---	
1,3-Dichloropropane	0.992	0.0260	0.0519	mg/kg	50	1.04	ND	95	77-121%	---	---	
2,2-Dichloropropane	1.12	0.0260	0.0519	mg/kg	50	1.04	ND	107	67-133%	---	---	
1,1-Dichloropropene	1.06	0.0260	0.0519	mg/kg	50	1.04	ND	102	76-125%	---	---	
cis-1,3-Dichloropropene	0.972	0.0260	0.0519	mg/kg	50	1.04	ND	94	74-126%	---	---	
trans-1,3-Dichloropropene	1.03	0.0260	0.0519	mg/kg	50	1.04	ND	99	71-130%	---	---	
Ethylbenzene	1.12	0.0130	0.0260	mg/kg	50	1.04	0.0841	100	76-122%	---	---	
Hexachlorobutadiene	1.22	0.0519	0.104	mg/kg	50	1.04	ND	117	61-135%	---	---	
2-Hexanone	1.73	0.519	0.519	mg/kg	50	2.08	ND	83	53-145%	---	---	Q-54g
Isopropylbenzene	1.03	0.0260	0.0519	mg/kg	50	1.04	0.0348	96	68-134%	---	---	
4-Isopropyltoluene	1.07	0.0260	0.0519	mg/kg	50	1.04	0.0306	100	73-127%	---	---	
Methylene chloride	1.04	0.260	0.519	mg/kg	50	1.04	ND	100	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	1.84	0.260	0.519	mg/kg	50	2.08	ND	89	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	0.0260	0.0519	mg/kg	50	1.04	ND	97	73-125%	---	---	
Naphthalene	2.23	0.0519	0.104	mg/kg	50	1.04	1.03	116	62-129%	---	---	
n-Propylbenzene	1.25	0.0130	0.0260	mg/kg	50	1.04	0.198	102	73-125%	---	---	
Styrene	0.941	0.0260	0.0519	mg/kg	50	1.04	ND	91	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.07	0.0130	0.0260	mg/kg	50	1.04	ND	103	78-125%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1004 - EPA 5035A							**Soil**					
Matrix Spike (23A1004-MS1)			Prepared: 01/20/23 00:00		Analyzed: 01/27/23 18:08							
QC Source Sample: Non-SDG (A3A0750-01)												
1,1,2,2-Tetrachloroethane	0.977	0.0260	0.0519	mg/kg	50	1.04	ND	94	70-124%	---	---	
Tetrachloroethene (PCE)	1.22	0.0130	0.0260	mg/kg	50	1.04	0.0935	108	73-128%	---	---	
Toluene	1.01	0.0260	0.0519	mg/kg	50	1.04	ND	98	77-121%	---	---	
1,2,3-Trichlorobenzene	1.07	0.130	0.260	mg/kg	50	1.04	ND	103	66-130%	---	---	
1,2,4-Trichlorobenzene	1.07	0.130	0.260	mg/kg	50	1.04	ND	103	67-129%	---	---	
1,1,1-Trichloroethane	1.14	0.0130	0.0260	mg/kg	50	1.04	ND	110	73-130%	---	---	
1,1,2-Trichloroethane	1.01	0.0130	0.0260	mg/kg	50	1.04	ND	98	78-121%	---	---	
Trichloroethene (TCE)	1.19	0.0130	0.0260	mg/kg	50	1.04	ND	115	77-123%	---	---	
Trichlorofluoromethane	1.34	0.0519	0.104	mg/kg	50	1.04	ND	129	62-140%	---	---	Q-54b
1,2,3-Trichloropropane	0.994	0.0260	0.0519	mg/kg	50	1.04	ND	96	73-125%	---	---	
1,2,4-Trimethylbenzene	3.96	0.0260	0.0519	mg/kg	50	1.04	2.72	120	75-123%	---	---	
1,3,5-Trimethylbenzene	2.10	0.0260	0.0519	mg/kg	50	1.04	0.920	114	73-124%	---	---	
Vinyl chloride	1.61	0.0130	0.0260	mg/kg	50	1.04	ND	**155**	**56-135%**	---	---	Q-54c
m,p-Xylene	2.55	0.0260	0.0519	mg/kg	50	2.08	0.381	104	77-124%	---	---	
o-Xylene	1.29	0.0130	0.0260	mg/kg	50	1.04	0.255	99	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*96 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*				*"*			

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ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1115 - EPA 3546									Liquid			
Blank (23A1115-BLK1)			Prepared: 01/31/23 10:51		Analyzed: 02/01/23 14:52							C-07
EPA 8082A												
Aroclor 1016	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.0250	0.0500	mg/kg	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 99 %*		*Limits: 60-125 %*				*Dilution: 1x*			
LCS (23A1115-BS1)			Prepared: 01/31/23 10:51		Analyzed: 02/01/23 15:10							C-07
EPA 8082A												
Aroclor 1016	1.03	0.0250	0.0500	mg/kg	1	1.25	---	82	47-134%	---	---	
Aroclor 1260	1.13	0.0250	0.0500	mg/kg	1	1.25	---	90	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 94 %*		*Limits: 60-125 %*				*Dilution: 1x*			
Duplicate (23A1115-DUP1)			Prepared: 01/31/23 10:51		Analyzed: 02/01/23 16:05							C-07
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
EPA 8082A												
Aroclor 1016	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	0.455	0.909	mg/kg	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 94 %*		*Limits: 60-125 %*				*Dilution: 1x*			
Matrix Spike (23A1115-MS1)			Prepared: 01/31/23 10:51		Analyzed: 02/01/23 16:53							C-07
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
EPA 8082A												
Aroclor 1016	16.3	0.455	0.909	mg/kg	1	22.7	ND	72	47-134%	---	---	
Aroclor 1260	18.8	0.455	0.909	mg/kg	1	22.7	ND	83	53-140%	---	---	

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Darwin Thomas, Business Development Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1115 - EPA 3546												**Liquid**
Matrix Spike (23A1115-MS1)					Prepared: 01/31/23 10:51 Analyzed: 02/01/23 16:53							**C-07**
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
Surr: Decachlorobiphenyl (Surr)					*Recovery: 92 %*		*Limits: 60-125 %*					*Dilution: 1x*

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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A												**Liquid**
Blank (23A1083-BLK1)				Prepared: 01/30/23 12:15 Analyzed: 01/30/23 15:37								
EPA 8270E												
Acenaphthene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Anthracene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0750	0.150	mg/kg	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0750	0.150	mg/kg	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0750	0.150	mg/kg	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Chrysene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Fluorene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.100	0.200	mg/kg	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.100	0.200	mg/kg	1	---	---	---	---	---	---	
Naphthalene	ND	0.100	0.200	mg/kg	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Pyrene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Carbazole	ND	0.0750	0.150	mg/kg	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Phenol	ND	0.100	0.200	mg/kg	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A								**Liquid**				
Blank (23A1083-BLK1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 15:37									
2,3,5,6-Tetrachlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.750	1.50	mg/kg	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.0500	0.100	mg/kg	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Aniline	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
4-Chloroaniline	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
2-Nitroaniline	ND	1.00	2.00	mg/kg	1	---	---	---	---	---	---	
3-Nitroaniline	ND	1.00	2.00	mg/kg	1	---	---	---	---	---	---	
4-Nitroaniline	ND	1.00	2.00	mg/kg	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.500	1.00	mg/kg	1	---	---	---	---	---	---	
Benzoic acid	ND	6.25	12.5	mg/kg	1	---	---	---	---	---	---	
Benzyl alcohol	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
Isophorone	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: Gasco-T-50 DNAPL	
6720 SW Macadam Ave. Suite 125	Project Number: 000029-02.84 T-(01.001K)	Report ID:
Portland, OR 97219	Project Manager: Ben Uhl	A3A0810 - 02 08 23 0645

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							Liquid					
Blank (23A1083-BLK1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 15:37									
Azobenzene (1,2-DPH)	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	1.00	2.00	mg/kg	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	1.25	2.50	mg/kg	1	---	---	---	---	---	---	
Pyridine	ND	0.250	0.500	mg/kg	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.125	0.250	mg/kg	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 99 %*			*Limits: 37-122 %*			*Dilution: 1x*			
2-Fluorobiphenyl (Surr)			*101 %*			*44-120 %*			*"*			
Phenol-d6 (Surr)			*95 %*			*33-122 %*			*"*			
p-Terphenyl-d14 (Surr)			*114 %*			*54-127 %*			*"*			
2-Fluorophenol (Surr)			*104 %*			*35-120 %*			*"*			
2,4,6-Tribromophenol (Surr)			*56 %*			*39-132 %*			*"*			
LCS (23A1083-BS1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 16:12									Q-18
EPA 8270E												
Acenaphthene	8.47	0.0500	0.100	mg/kg	1	8.00	---	106	40-123%	---	---	
Acenaphthylene	9.00	0.0500	0.100	mg/kg	1	8.00	---	112	32-132%	---	---	
Anthracene	8.99	0.0500	0.100	mg/kg	1	8.00	---	112	47-123%	---	---	
Benz(a)anthracene	8.77	0.0500	0.100	mg/kg	1	8.00	---	110	49-126%	---	---	
Benzo(a)pyrene	8.16	0.0750	0.150	mg/kg	1	8.00	---	102	45-129%	---	---	
Benzo(b)fluoranthene	8.01	0.0750	0.150	mg/kg	1	8.00	---	100	45-132%	---	---	
Benzo(k)fluoranthene	8.34	0.0750	0.150	mg/kg	1	8.00	---	104	47-132%	---	---	
Benzo(g,h,i)perylene	9.22	0.0500	0.100	mg/kg	1	8.00	---	115	43-134%	---	---	
Chrysene	8.49	0.0500	0.100	mg/kg	1	8.00	---	106	50-124%	---	---	
Dibenz(a,h)anthracene	8.62	0.0500	0.100	mg/kg	1	8.00	---	108	45-134%	---	---	
Fluoranthene	9.39	0.0500	0.100	mg/kg	1	8.00	---	117	50-127%	---	---	
Fluorene	8.84	0.0500	0.100	mg/kg	1	8.00	---	110	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	8.88	0.0500	0.100	mg/kg	1	8.00	---	111	45-133%	---	---	
1-Methylnaphthalene	8.65	0.100	0.200	mg/kg	1	8.00	---	108	40-120%	---	---	
2-Methylnaphthalene	8.98	0.100	0.200	mg/kg	1	8.00	---	112	38-122%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							**Liquid**					
LCS (23A1083-BS1)			Prepared: 01/30/23 12:15		Analyzed: 01/30/23 16:12							**Q-18**
Naphthalene	8.60	0.100	0.200	mg/kg	1	8.00	---	107	35-123%	---	---	
Phenanthrene	8.34	0.0500	0.100	mg/kg	1	8.00	---	104	50-121%	---	---	
Pyrene	9.51	0.0500	0.100	mg/kg	1	8.00	---	119	47-127%	---	---	
Dibenzofuran	8.78	0.0500	0.100	mg/kg	1	8.00	---	110	44-120%	---	---	
2-Chlorophenol	8.46	0.250	0.500	mg/kg	1	8.00	---	106	34-121%	---	---	
4-Chloro-3-methylphenol	9.14	0.500	1.00	mg/kg	1	8.00	---	114	45-122%	---	---	
2,4-Dichlorophenol	9.10	0.250	0.500	mg/kg	1	8.00	---	114	40-122%	---	---	
2,4-Dimethylphenol	9.93	0.250	0.500	mg/kg	1	8.00	---	124	30-127%	---	---	
2,4-Dinitrophenol	8.27	1.25	2.50	mg/kg	1	8.00	---	103	10-137%	---	---	
4,6-Dinitro-2-methylphenol	8.81	1.25	2.50	mg/kg	1	8.00	---	110	29-132%	---	---	
2-Methylphenol	8.69	0.125	0.250	mg/kg	1	8.00	---	109	32-122%	---	---	
3+4-Methylphenol(s)	8.60	0.125	0.250	mg/kg	1	8.00	---	108	34-120%	---	---	
2-Nitrophenol	8.63	0.500	1.00	mg/kg	1	8.00	---	108	36-123%	---	---	
4-Nitrophenol	8.84	0.500	1.00	mg/kg	1	8.00	---	110	30-132%	---	---	
Pentachlorophenol (PCP)	8.76	0.500	1.00	mg/kg	1	8.00	---	109	25-133%	---	---	
Phenol	7.49	0.100	0.200	mg/kg	1	8.00	---	94	34-121%	---	---	
2,3,4,6-Tetrachlorophenol	8.98	0.250	0.500	mg/kg	1	8.00	---	112	44-125%	---	---	
2,3,5,6-Tetrachlorophenol	8.77	0.250	0.500	mg/kg	1	8.00	---	110	40-120%	---	---	
2,4,5-Trichlorophenol	9.11	0.250	0.500	mg/kg	1	8.00	---	114	41-124%	---	---	
Nitrobenzene	8.81	0.500	1.00	mg/kg	1	8.00	---	110	34-122%	---	---	
2,4,6-Trichlorophenol	8.61	0.250	0.500	mg/kg	1	8.00	---	108	39-126%	---	---	
Bis(2-ethylhexyl)phthalate	8.19	0.750	1.50	mg/kg	1	8.00	---	102	51-133%	---	---	
Butyl benzyl phthalate	8.32	0.500	1.00	mg/kg	1	8.00	---	104	48-132%	---	---	
Diethylphthalate	8.89	0.500	1.00	mg/kg	1	8.00	---	111	50-124%	---	---	
Dimethylphthalate	8.80	0.500	1.00	mg/kg	1	8.00	---	110	48-124%	---	---	
Di-n-butylphthalate	8.13	0.500	1.00	mg/kg	1	8.00	---	102	51-128%	---	---	
Di-n-octyl phthalate	8.02	0.500	1.00	mg/kg	1	8.00	---	100	45-140%	---	---	
N-Nitrosodimethylamine	7.60	0.125	0.250	mg/kg	1	8.00	---	95	23-120%	---	---	
N-Nitroso-di-n-propylamine	8.89	0.125	0.250	mg/kg	1	8.00	---	111	36-120%	---	---	
N-Nitrosodiphenylamine	8.69	0.125	0.250	mg/kg	1	8.00	---	109	38-127%	---	---	
Bis(2-Chloroethoxy) methane	8.55	0.125	0.250	mg/kg	1	8.00	---	107	36-121%	---	---	
Bis(2-Chloroethyl) ether	7.28	0.125	0.250	mg/kg	1	8.00	---	91	31-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	8.01	0.125	0.250	mg/kg	1	8.00	---	100	39-120%	---	---	
Hexachlorobenzene	8.26	0.0500	0.100	mg/kg	1	8.00	---	103	45-122%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							**Liquid**					
LCS (23A1083-BS1)			Prepared: 01/30/23 12:15		Analyzed: 01/30/23 16:12							**Q-18**
Hexachlorobutadiene	8.41	0.125	0.250	mg/kg	1	8.00	---	105	32-123%	---	---	
Hexachlorocyclopentadiene	7.27	0.250	0.500	mg/kg	1	8.00	---	91	10-140%	---	---	
Hexachloroethane	8.47	0.125	0.250	mg/kg	1	8.00	---	106	28-120%	---	---	
2-Chloronaphthalene	8.15	0.0500	0.100	mg/kg	1	8.00	---	102	41-120%	---	---	
1,2,4-Trichlorobenzene	8.79	0.125	0.250	mg/kg	1	8.00	---	110	34-120%	---	---	
4-Bromophenyl phenyl ether	8.58	0.125	0.250	mg/kg	1	8.00	---	107	46-124%	---	---	
4-Chlorophenyl phenyl ether	8.74	0.125	0.250	mg/kg	1	8.00	---	109	45-121%	---	---	
Aniline	7.42	0.250	0.500	mg/kg	1	8.00	---	93	10-120%	---	---	
4-Chloroaniline	3.54	0.125	0.250	mg/kg	1	8.00	---	44	17-120%	---	---	
2-Nitroaniline	8.44	1.00	2.00	mg/kg	1	8.00	---	106	44-127%	---	---	
4-Nitroaniline	9.69	1.00	2.00	mg/kg	1	8.00	---	121	51-125%	---	---	
2,4-Dinitrotoluene	9.26	0.500	1.00	mg/kg	1	8.00	---	116	48-126%	---	---	
2,6-Dinitrotoluene	8.51	0.500	1.00	mg/kg	1	8.00	---	106	46-124%	---	---	
Benzoic acid	14.2	6.25	12.5	mg/kg	1	16.0	---	89	10-140%	---	---	Q-31
Benzyl alcohol	8.03	0.250	0.500	mg/kg	1	8.00	---	100	29-122%	---	---	
Isophorone	8.98	0.125	0.250	mg/kg	1	8.00	---	112	30-122%	---	---	
Azobenzene (1,2-DPH)	8.12	0.125	0.250	mg/kg	1	8.00	---	102	39-125%	---	---	
Bis(2-Ethylhexyl) adipate	8.17	1.25	2.50	mg/kg	1	8.00	---	102	61-121%	---	---	
3,3'-Dichlorobenzidine	29.6	1.00	2.00	mg/kg	1	16.0	---	**185**	**22-121%**	---	---	Q-29, Q-52
1,2-Dinitrobenzene	9.00	1.25	2.50	mg/kg	1	8.00	---	113	44-120%	---	---	
1,3-Dinitrobenzene	8.59	1.25	2.50	mg/kg	1	8.00	---	107	43-127%	---	---	
1,4-Dinitrobenzene	9.00	1.25	2.50	mg/kg	1	8.00	---	113	37-132%	---	---	
Pyridine	6.88	0.250	0.500	mg/kg	1	8.00	---	86	10-120%	---	---	
1,2-Dichlorobenzene	8.38	0.125	0.250	mg/kg	1	8.00	---	105	33-120%	---	---	
1,3-Dichlorobenzene	8.23	0.125	0.250	mg/kg	1	8.00	---	103	30-120%	---	---	
1,4-Dichlorobenzene	8.22	0.125	0.250	mg/kg	1	8.00	---	103	31-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 114 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*101 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*94 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*116 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*112 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*108 %*		*39-132 %*			*"*				
LCS (23A1083-BS2)			Prepared: 01/30/23 12:15		Analyzed: 01/31/23 12:03							

Apex Laboratories

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							**Liquid**					
LCS (23A1083-BS2)			Prepared: 01/30/23 12:15 Analyzed: 01/31/23 12:03									
EPA 8270E												
Carbazole	9.40	0.300	0.600	mg/kg	4	8.00	---	117	50-123%	---	---	
3-Nitroaniline	6.88	4.00	4.00	mg/kg	4	8.00	---	86	33-120%	---	---	
Duplicate (23A1083-DUP1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 17:21									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
EPA 8270E												
Acenaphthene	**17600**	38.5	76.9	mg/kg	100	---	17200	---	---	2	30%	
Acenaphthylene	ND	846	846	mg/kg	100	---	ND	---	---	---	30%	R-02
Anthracene	**7810**	38.5	76.9	mg/kg	100	---	7580	---	---	3	30%	
Benz(a)anthracene	**3730**	38.5	76.9	mg/kg	100	---	3670	---	---	2	30%	
Benzo(a)pyrene	**4040**	57.7	115	mg/kg	100	---	3990	---	---	1	30%	
Benzo(b)fluoranthene	**3350**	57.7	115	mg/kg	100	---	3340	---	---	0.5	30%	
Benzo(k)fluoranthene	**1200**	57.7	115	mg/kg	100	---	1210	---	---	0.9	30%	M-05
Benzo(g,h,i)perylene	**2570**	38.5	76.9	mg/kg	100	---	2570	---	---	0.3	30%	
Chrysene	**4970**	38.5	76.9	mg/kg	100	---	4680	---	---	6	30%	
Dibenz(a,h)anthracene	**230**	38.5	76.9	mg/kg	100	---	202	---	---	13	30%	
Fluoranthene	**18700**	38.5	76.9	mg/kg	100	---	18300	---	---	2	30%	
Fluorene	**8460**	38.5	76.9	mg/kg	100	---	9270	---	---	9	30%	
Indeno(1,2,3-cd)pyrene	**2200**	38.5	76.9	mg/kg	100	---	2130	---	---	3	30%	
1-Methylnaphthalene	**16000**	76.9	154	mg/kg	100	---	15300	---	---	4	30%	
2-Methylnaphthalene	**23100**	76.9	154	mg/kg	100	---	22800	---	---	1	30%	
Naphthalene	**24200**	76.9	154	mg/kg	100	---	23500	---	---	3	30%	
Phenanthrene	**35800**	38.5	76.9	mg/kg	100	---	34300	---	---	4	30%	RR-2
Pyrene	**21800**	38.5	76.9	mg/kg	100	---	21600	---	---	1	30%	
Carbazole	**1930**	57.7	115	mg/kg	100	---	2200	---	---	13	30%	
Dibenzofuran	**1520**	38.5	76.9	mg/kg	100	---	1480	---	---	2	30%	
2-Chlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
4-Chloro-3-methylphenol	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
2,4-Dichlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
2,4-Dimethylphenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
2,4-Dinitrophenol	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
4,6-Dinitro-2-methylphenol	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
2-Methylphenol	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							**Liquid**					
Duplicate (23A1083-DUP1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 17:21									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
3+4-Methylphenol(s)	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
2-Nitrophenol	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
4-Nitrophenol	ND	1770	1770	mg/kg	100	---	ND	---	---	---	30%	R-02
Pentachlorophenol (PCP)	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Phenol	ND	76.9	154	mg/kg	100	---	ND	---	---	---	30%	
2,3,4,6-Tetrachlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
2,3,5,6-Tetrachlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
2,4,5-Trichlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
Nitrobenzene	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
2,4,6-Trichlorophenol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
Bis(2-ethylhexyl)phthalate	ND	577	1150	mg/kg	100	---	ND	---	---	---	30%	
Butyl benzyl phthalate	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Diethylphthalate	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Dimethylphthalate	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Di-n-butylphthalate	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Di-n-octyl phthalate	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
N-Nitrosodimethylamine	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
N-Nitroso-di-n-propylamine	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
N-Nitrosodiphenylamine	ND	923	923	mg/kg	100	---	ND	---	---	---	30%	R-02
Bis(2-Chloroethoxy) methane	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Bis(2-Chloroethyl) ether	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
2,2'-Oxybis(1-Chloropropane)	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Hexachlorobenzene	ND	38.5	76.9	mg/kg	100	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Hexachlorocyclopentadiene	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
Hexachloroethane	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
2-Chloronaphthalene	ND	76.9	76.9	mg/kg	100	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
4-Bromophenyl phenyl ether	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
4-Chlorophenyl phenyl ether	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Aniline	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
4-Chloroaniline	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
2-Nitroaniline	ND	769	1540	mg/kg	100	---	ND	---	---	---	30%	

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A1083 - EPA 3580A							**Liquid**					
Duplicate (23A1083-DUP1)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 17:21									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
3-Nitroaniline	ND	769	1540	mg/kg	100	---	ND	---	---	---	30%	
4-Nitroaniline	ND	769	1540	mg/kg	100	---	ND	---	---	---	30%	
2,4-Dinitrotoluene	ND	1000	1000	mg/kg	100	---	ND	---	---	---	30%	R-02
2,6-Dinitrotoluene	ND	385	769	mg/kg	100	---	ND	---	---	---	30%	
Benzoic acid	ND	4810	9620	mg/kg	100	---	ND	---	---	---	30%	
Benzyl alcohol	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
Isophorone	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Azobenzene (1,2-DPH)	ND	192	192	mg/kg	100	---	ND	---	---	---	30%	
Bis(2-Ethylhexyl) adipate	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
3,3'-Dichlorobenzidine	ND	769	1540	mg/kg	100	---	ND	---	---	---	30%	Q-52
1,2-Dinitrobenzene	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
1,3-Dinitrobenzene	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
1,4-Dinitrobenzene	ND	962	1920	mg/kg	100	---	ND	---	---	---	30%	
Pyridine	ND	192	385	mg/kg	100	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	96.2	192	mg/kg	100	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 120 %*		*Limits: 37-122 %*		*Dilution: 100x*					S-05
2-Fluorobiphenyl (Surr)			*153 %*		*44-120 %*		*"*					S-05
Phenol-d6 (Surr)			*63 %*		*33-122 %*		*"*					S-05
p-Terphenyl-d14 (Surr)			*126 %*		*54-127 %*		*"*					S-05
2-Fluorophenol (Surr)			*53 %*		*35-120 %*		*"*					S-05
2,4,6-Tribromophenol (Surr)			*334 %*		*39-132 %*		*"*					S-05
Duplicate (23A1083-DUP2)			Prepared: 01/30/23 12:15 Analyzed: 01/30/23 18:30									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01RE1)												
EPA 8270E												
Phenanthrene	**55100**	385	769	mg/kg	1000	---	61800	---	---	11	30%	

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APEX LABORATORIES

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0958 - EPA 3015A							**Liquid**					
Blank (23A0958-BLK1)			Prepared: 01/26/23 11:12 Analyzed: 01/27/23 14:32									
EPA 6020B												
Arsenic	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	
Barium	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	
Cadmium	ND	0.100	0.200	mg/kg	10	---	---	---	---	---	---	
Chromium	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	
Lead	ND	0.100	0.200	mg/kg	10	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	mg/kg	10	---	---	---	---	---	---	
Selenium	ND	0.500	1.00	mg/kg	10	---	---	---	---	---	---	
Silver	ND	0.100	0.200	mg/kg	10	---	---	---	---	---	---	
LCS (23A0958-BS1)			Prepared: 01/26/23 11:12 Analyzed: 01/27/23 14:37									
EPA 6020B												
Arsenic	48.0	0.500	1.00	mg/kg	10	50.0	---	96	80-120%	---	---	
Barium	49.4	0.500	1.00	mg/kg	10	50.0	---	99	80-120%	---	---	
Cadmium	49.8	0.100	0.200	mg/kg	10	50.0	---	100	80-120%	---	---	
Chromium	48.3	0.500	1.00	mg/kg	10	50.0	---	97	80-120%	---	---	
Lead	48.7	0.100	0.200	mg/kg	10	50.0	---	97	80-120%	---	---	
Mercury	0.990	0.0400	0.0800	mg/kg	10	1.00	---	99	80-120%	---	---	
Selenium	23.3	0.500	1.00	mg/kg	10	25.0	---	93	80-120%	---	---	
Silver	25.6	0.100	0.200	mg/kg	10	25.0	---	102	80-120%	---	---	
Duplicate (23A0958-DUP2)			Prepared: 01/26/23 11:12 Analyzed: 01/27/23 16:54									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01RE1)												
EPA 6020B												
Arsenic	**6.80**	0.521	1.04	mg/kg	10	---	6.97	---	---	2	20%	Q-16
Barium	ND	0.521	1.04	mg/kg	10	---	ND	---	---	---	20%	Q-16
Cadmium	ND	0.104	0.208	mg/kg	10	---	ND	---	---	---	20%	Q-16
Chromium	ND	0.521	1.04	mg/kg	10	---	ND	---	---	---	20%	Q-16
Lead	ND	0.104	0.208	mg/kg	10	---	ND	---	---	---	20%	Q-16
Mercury	ND	0.0417	0.0833	mg/kg	10	---	ND	---	---	---	20%	Q-16
Selenium	ND	0.521	1.04	mg/kg	10	---	ND	---	---	---	20%	Q-16
Silver	ND	0.104	0.208	mg/kg	10	---	ND	---	---	---	20%	Q-16
Matrix Spike (23A0958-MS2)			Prepared: 01/26/23 11:12 Analyzed: 01/27/23 16:59									

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0958 - EPA 3015A							**Liquid**					
Matrix Spike (23A0958-MS2)			Prepared: 01/26/23 11:12 Analyzed: 01/27/23 16:59									
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01RE1)												
EPA 6020B												
Arsenic	58.4	0.521	1.04	mg/kg	10	52.1	6.97	99	75-125%	---	---	Q-16
Barium	49.1	0.521	1.04	mg/kg	10	52.1	ND	94	75-125%	---	---	Q-16
Cadmium	50.9	0.104	0.208	mg/kg	10	52.1	ND	98	75-125%	---	---	Q-16
Chromium	50.3	0.521	1.04	mg/kg	10	52.1	ND	96	75-125%	---	---	Q-16
Lead	50.6	0.104	0.208	mg/kg	10	52.1	ND	97	75-125%	---	---	Q-16
Mercury	0.968	0.0417	0.0833	mg/kg	10	1.04	ND	93	75-125%	---	---	Q-16
Selenium	26.0	0.521	1.04	mg/kg	10	26.0	ND	100	75-125%	---	---	Q-16
Silver	26.2	0.104	0.208	mg/kg	10	26.0	ND	101	75-125%	---	---	Q-16

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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23A0930 - DI Leach								**Liquid**				
Duplicate (23A0930-DUP1)			Prepared: 01/25/23 15:18		Analyzed: 01/25/23 16:39							
QC Source Sample: T-50-DNAPL-01202023 (A3A0810-01)												
EPA 9045D												
Liquid/Oil pH (measured in H2O)	**7.3**			pH Units	1	---	7.3	---	---	0.5	10%	pH_S
pH Temperature (deg C)	**23.1**			pH Units	1	---	24.3	---	---	5	30%	pH_S
Reference (23A0930-SRM1)			Prepared: 01/25/23 15:18		Analyzed: 01/25/23 16:24							
EPA 9045D												
Liquid/Oil pH (measured in H2O)	6.0			pH Units	1	6.00		100	98-102%	---	---	
pH Temperature (deg C)	22.0			pH Units	1	20.0		110	50-200%	---	---	
Reference (23A0930-SRM2)			Prepared: 01/25/23 15:18		Analyzed: 01/25/23 16:41							
EPA 9045D												
Liquid/Oil pH (measured in H2O)	7.9			pH Units	1	8.00		99	99-101%	---	---	
pH Temperature (deg C)	22.0			pH Units	1	20.0		110	50-200%	---	---	

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Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23B0160 - Flashpoint							**Soil**					
LCS (23B0160-BS1)			Prepared: 02/03/23 16:23			Analyzed: 02/03/23 16:49						
EPA 1010M												
Flash Point (Ignitability)	141			degF	1	145	---	97	95-105%	---	---	

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Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
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SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A0903							
A3A0810-01	Liquid	5035A/8260D	01/20/23 10:15	01/24/23 15:43	0.5g/5mL	5g/5mL	10.00
Batch: 23A1004							
A3A0810-01RE1	Liquid	5035A/8260D	01/20/23 10:15	01/24/23 15:43	0.5g/5mL	5g/5mL	10.00

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A1115							
A3A0810-01	Liquid	EPA 8082A	01/20/23 10:15	01/31/23 10:51	0.13g/5mL	2g/5mL	15.40

Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3580A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A1083							
A3A0810-01	Liquid	EPA 8270E	01/20/23 10:15	01/30/23 12:15	0.13g/5mL	1g/5mL	7.69
A3A0810-01RE1	Liquid	EPA 8270E	01/20/23 10:15	01/30/23 12:15	0.13g/5mL	1g/5mL	7.69

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A0958							
A3A0810-01RE1	Liquid	EPA 6020B	01/20/23 10:15	01/26/23 11:12	0.479g/50mL	0.5g/50mL	1.04

Conventional Chemistry Parameters

Prep: DI Leach

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23A0930							
A3A0810-01	Liquid	EPA 9045D	01/20/23 10:15	01/25/23 15:18	10.1085g/10mL	20g/20mL	NA

Prep: Flashpoint

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

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Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

SAMPLE PREPARATION INFORMATION

Conventional Chemistry Parameters

Prep: Flashpoint

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23B0160							
A3A0810-01	Liquid	EPA 1010M	01/20/23 10:15	02/03/23 16:23			NA

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
M-05	Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
pH_S	Method recommends preparation 'as soon as possible'. See Sample Preparation Information section of report for details. Consult regulator or permit manager to determine the usability of data for intended purpose.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-16	Reanalysis of an original Batch QC sample.
Q-18	Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
Q-29	Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
Q-31	Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
Q-52	Due to known erratic recoveries, the result and reporting levels for this analyte are reported as Estimated Values. This analyte may not have passed all QC requirements for this method.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +22%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +23%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +26%. The results are reported as Estimated Values.
Q-54c	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +46%. The results are reported as Estimated Values.
Q-54d	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +74%. The results are reported as Estimated Values.
Q-54e	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +9%. The results are reported as Estimated Values.
Q-54f	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +96%. The results are reported as Estimated Values.
Q-54g	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -1%. The results are reported as Estimated Values.
Q-54h	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
RR-2	Not Reported - Needs Dilution. Sample will be Rerun.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.
V-16	Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.

Apex Laboratories

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ANALYTICAL REPORT

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

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6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

Apex Labs — **CHAIN OF CUSTODY** — Lab # A3A0810 — COC 1 of 1

Company: Anchor QEA | Project Mgr: Ben Uhl | Project Name: GASCO T-50 DNAPL | Project # 000029-02.84 (01.001K)
Address: 6720 S Macadam Ave. Portland, OR | Phone: 503-924-6187 | Fax: — | Email: Buhl@anchorqea.com
Sampled by: Doug Laffoon / Casey Montgomery

Site Location: (OR) WA
Other: _____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	VOCs (EPA 8260B)	SVOCs-full list (EPA 8270C)	RCRA 8 Metals (EPA 6020A)	Flashpoint (EPA 1010A)	Heating Value/BTU Content (D2015)	pH (EPA 150.3/9040A)	PCBs (EPA 8082A)	Comments
T-50-DNAPL-01202023		1/20/2023	1015	PR	2	X	X	X	X	X	X	X	

ANALYSIS REQUEST

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | **Standard** | Other: _____

SPECIAL INSTRUCTIONS:

Please copy Tim Stone at Anchor QEA with results (tstone@anchorqea.com)

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:
Signature: [signature]	Signature: [signature]
Date: 1-20-2023	Date: 1/20/23
Printed Name: Doug Laffoon	Printed Name: Eli Spencer
Time: 1140	Time: 1140
Company: Anchor QEA	Company: APEX LABS

RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:
Date:	Date:
Printed Name:	Printed Name:
Time:	Time:
Company:	Company:

Apex Laboratories

[signature]
Darwin Thomas, Business Development Director

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503-718-2323
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ANALYTICAL REPORT

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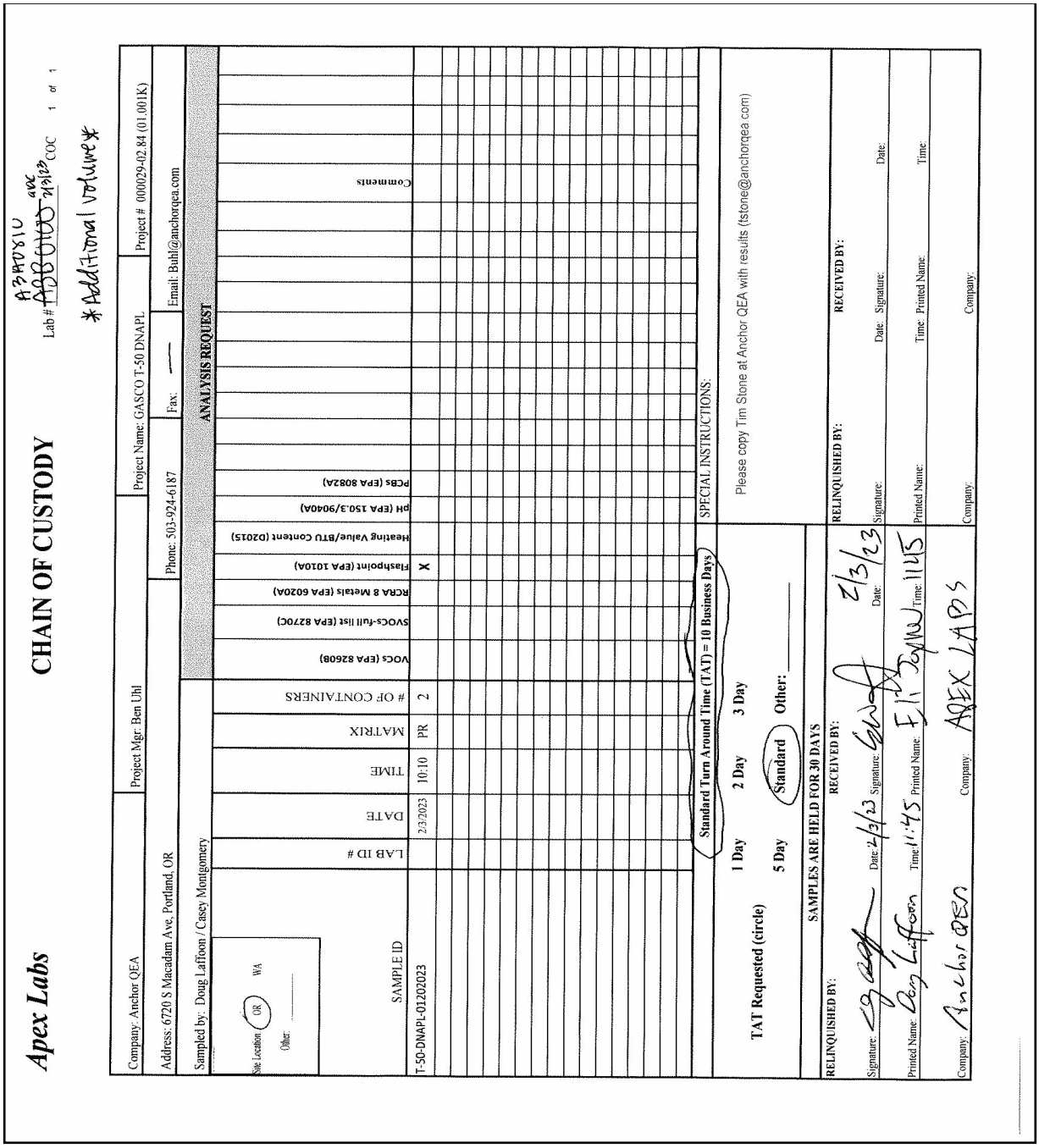

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6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
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1/2

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A3 A0810

Project/Project #: Gasco T-50 DNAPL / 000029-02.84(01.001K)

Delivery Info:

Date/time received: 1/20/23 @ 1140 By: ~~KMO~~ EJT

Delivered by: Apex X Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

Cooler Inspection Date/time inspected: 1/20/23 @ 1235 By: KMO

Chain of Custody included? Yes X No

Signed/dated by client? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.8						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 1/20/23 @ 1547 By:

All samples intact? Yes X No Comments:

Bottle labels/COCs agree? Yes X No Comments:

COC/container discrepancies form initiated? Yes No X

Containers/volumes received appropriate for analysis? Yes X No Comments:

Do VOA vials have visible headspace? Yes No NA X

Comments

Water samples: pH checked: Yes No NA X pH appropriate? Yes No NA X

Comments:

Additional information:

Labeled by: Witness: Cooler Inspected by:

Form Y-003 R-00

Apex Laboratories

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Anchor QEA, LLC	Project: **Gasco-T-50 DNAPL**	
6720 SW Macadam Ave. Suite 125	Project Number: **000029-02.84 T-(01.001K)**	**Report ID:**
Portland, OR 97219	Project Manager: **Ben Uhl**	**A3A0810 - 02 08 23 0645**

APEX LABS COOLER RECEIPT FORM

2/2

Client: Anchor QEA Element WO#: A3 ~~A50100~~ A0810 arac 2/3/23

Project/Project #: Gasco T-50 DNAPL 000029-02.84 (01.001K)

Additional volume

Delivery Info:

Date/time received: 2/3/23 @ 1145 By: EST

Delivered by: Apex X Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

Cooler Inspection Date/time inspected: 2/3/23 @ 1245 By: EST

Chain of Custody included? Yes X No

Signed/dated by client? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.5						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Gel						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 2/3/23 @ 12:47 By: AAW

All samples intact? Yes X No Comments:

Bottle labels/COCs agree? Yes X No X Comments: Container time reads 10:10

COC/container discrepancies form initiated? Yes No X

Containers/volumes received appropriate for analysis? Yes X No Comments:

Do VOA vials have visible headspace? Yes No NA X

Comments

Water samples: pH checked: Yes No NA X pH appropriate? Yes No NA X

Comments:

Additional information:

Labeled by: AAW Witness: JS Cooler Inspected by: AAW

Form Y-003 R-00

Apex Laboratories

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Darwin Thomas, Business Development Director

PRECISION PETROLEUM LABS, INC.

CERTIFICATE OF ANALYSIS

LABORATORY ADDRESS	Client Name: Apex Laboratories
5915 Star Lane, Houston, TX 77057 Ph. 713-680-9425 Fax: 713-680-9564 Website: precisionlabs.org	Street Address: 6700 S.W. Sandburg Street City, State, Zip: Tigard, OR 97223

INVOICE No.	97153	DATE RECEIVED	02-07-2023
LAB REFERENCE No.	2023-02-129	DATE/TIME COLLECTED	02-03-2023@11:45
AUTHORIZED BY	Darwin Thomas	MATRIX TYPE	Liquid
PRODUCT ID	(A3A0810-01) T-50-01202023-6		

PARAMETER	TEST METHOD	REPORTING LIMIT	TEST RESULT
Heat of combustion, BTU/Lb.,	D-240	2,150	15,258

Daniel Zabihi **Date: 02-07-2023**
QA Manager

PRIMARY ACCREDITATION TCEQ, #T104704203-22-16
ARIZONA LICENSE # AZ0630

QUALIFIERS & ABBREVIATIONS: BRL - Below Reporting Limit; SCL - Test performed by an approved subcontract laboratory; B - Analyte was detected in the associated method blank; Matrix spike/matrix spike duplicate (M), Laboratory control sample (L), Calibration criteria (C), and Surrogate (S) recoveries were outside acceptance limits. Test deviation applied to Method 8260 (VOCS). Sample date analyzed for each test is available upon request. *Not on laboratory's field of accreditation.

COMMENTS: This certificate is Confidential Business Information and will only be provided to designated customer point-of-contact(s). Other production of this report requires prior authorization from the customer. There were no quality assurance anomalies associated with these tests.

SUBCONTRACT ORDER

Apex Laboratories

A3A0810

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

Precision Petroleum Labs
5915 Star Lane
Houston, TX 77057
Phone :(713) 680-9425
Fax: (713) 680-9564

2x8oz Jars received 2/3/23@1145 by ESJ & tim

Sample Name: T-50-DNAPL-01202023 **Liquid** **Sampled: 01/20/23 10:15** (A3A0810-01)

Analysis	Due	Expires	Comments
Subcontract Outside	02/10/23 17:00	07/19/23 10:15	Heat of combustion-btu/Lb by D-240
Containers Supplied:			
(A)8 oz Glass Jar			

3-day TAT

RECEIVED
FEB 07 2023
PRECISION PETROLEUM LABS, INC.

10:10 N.L.

Released By	Date	Received By	Date
	2/6/23	UPS (Shipper)	
UPS (Shipper)			
Released By	Date	Received By	Date