Inglewood Oil Field – 2022 Abandoned Well Testing Report

Los Angeles County, California

Sentinel Peak Resources
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SCS ENGINEERS

Project No. 01219202.00 | December 2022

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This Abandoned Well Soil Gas Investigation report dated December 2022 for the Inglewood Oil Field located in the Baldwin Hills area of Los Angeles County was prepared and reviewed by the following:

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SCS Engineers

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DISCLAIMER

This report has been prepared for the exclusive use of Sentinel Peak Resources and pertinent regulatory agencies. Unauthorized use of or reliance on the information contained in this report by others, unless given the express written consent by SCS Engineers, is prohibited.

The conclusions and recommendations presented in this report are professional opinions based on the data acquired during this monitoring event. This report has been prepared in accordance with generally accepted methodologies and standards of professional practice in the subject locale at the time the work was performed. No other warranties, express or implied, are made.

1 INTRODUCTION

SCS Engineers (SCS) was retained by Sentinel Peak Resources California LLC (SPR) to conduct annual soil gas methane monitoring at the Inglewood Oil Field located in the Baldwin Hills area of Los Angeles County. Investigation activities were conducted in accordance with SCS' proposal dated August 9, 2022 (Proposal No. 01080322). A map showing the location of the Property is provided as **Figure 1**.

2 GENERAL BACKGROUND

The Inglewood Oil Field (the"Field"), located in the Baldwin Hills area of Los Angeles County (Figure 1) has been in operation for over 85 years with over 1,600 wells having been drilled during that time throughout the historical boundaries. On October 28, 2008, the Los Angeles County Board of Supervisors adopted the Baldwin Hills Community Standards District (CSD) amendment to the Los Angeles County Zoning Code and established additional development standards and operating procedures for the oil and gas production operations at the Field.

SPR currently owns and operates the Field in the Baldwin Hills Zoned District of Los Angeles County. Oil and gas exploration and production in the Field includes approximately 1,463 active, idle, and abandoned wells within the current surface lease boundary. Previous owners/operators include Chevron, Stocker Resources, Plains Exploration and Production Company (PXP), and Freeport McMoran Oil & Gas (FMOG).

Existing operations of the Field involve extracting oil and gas from subsurface reservoirs located between 800 and 10,000 feet below ground surface (bgs), as well as, the removal of water and liquids from the crude oil and gas. The crude oil is transported through pipelines to Southern California refineries to be processed into gasoline and other products. The gas is transported by pipeline to the SoCal Gas Company for use by consumers and industry or is shipped to refineries for processing.

Annual soil gas methane monitoring at the Inglewood Oil Field is required by the County of Los Angeles, Title 22, Department of Regional Planning, Section 22.310.050, Part FF (formerly Section E.32 of the CSD), which states:.

"*Abandoned Well Testing. The operator shall conduct annual hydrocarbon vapor testing of areas within the oil field that contain abandoned wells. The testing shall be done using a soil gas vapor probe, or another method approved by the director. The results of the testing shall be submitted to the director and DOGGR [State of California Division of Oil, Gas, and Geothermal Resources] on an annual basis. Abandoned wells that are found to be leaking hydrocarbons that could affect health and safety shall be reported to the director and DOGGR within 24 hours of the abandoned well test. If directed by DOGGR, the operator shall re-abandon the well in accordance with DOGGR rules and regulations. If the test results for an abandoned well area are at or below the background levels for two consecutive years that area shall thereafter be tested every five years*."

Soil gas monitoring of the area of abandoned wells has been conducted annually since the adoption of the CSD amendment. Results of the sampling were compared to the regulations and requirements of the City of Inglewood, LA County Department of Public Works, LA County Fire Department, the California Code, and the South Coast Air Quality Management District (SCAQMD) in reports submitted to LA County and the California Geologic Energy Management Division (CalGEM),

formerly known as DOGGR. The reports completed from 2014 through 2019 concluded that there is no evidence of leaking or natural seepage from abandoned wells at the oil field.

A Hydraulic Fracturing Study of the Inglewood Oil Field, conducted by Cardno ENTRIX (Cardno; Cardno, 2012) states "Background soil gas methane concentrations throughout Southern California are typically 50 parts per million by volume (ppmv) or less, although in Los Angeles certain areas are known to have higher background concentrations and have been identified on City Methane Zone Maps." In 1986, Geoscience Analytical, Inc (GAI) conducted a study at the Inglewood Oil Field. During the GAI study 31 soil gas samples were collected and analyzed for C_1-C_7 hydrocarbons and hydrogen sulfide. Based on the results, GAI concluded that the soil gases detected in the oil field were likely of a biogenic source through bacterial decomposition of crude oil in the near surface soils rather than a petrogenic source, such as natural gas releases from the oil field or associated oil wells.

OTHER REGULATORY AND SAFETY CONSIDERATIONS

According to CalGEM Publication PRC10, Article 4.1, dated January of 2018, the following two statutes/regulations are applicable to abandoned wells:

- "The supervisor, in cooperation with appropriate state and local agencies, shall conduct a study of abandoned oil and gas wells located in those areas of the state with substantial for methane and other hazardous gas accumulations in order to determine the location, the extent of methane gas and other hazardous gas accumulations, and potential hazards from the abandoned wells."
- "The supervisor, in cooperation with appropriate state and local agencies, shall develop a strategy for extracting existing accumulations of methane gas and other hazardous gas from abandoned oil and gas wells in high-risk areas identified by the supervisor in order to protect the health and safety of the public. The strategy shall also provide plans for the management of methane gas and other hazardous gas from wells in the high-risk areas where no accumulations are discovered in order to prevent future accumulations of methane gas and other hazardous gas."

The California Code of Regulations (CCR), Subchapter 18, states "*Atmospheres with a concentration of flammable vapors at or above 10 percent of the LEL (Lower Explosive Limit) are considered hazardous when located in confined spaces*."

CCR, Subchapter 17, Section 95471 regulates methane surface concentrations at landfills as follow:

- "Owner or operator must record any instantaneous surface readings of methane 200 ppmv or greater, other than non-repeatable, momentary readings."
- "Surface areas of the landfill that exceed a methane concentration of 500 ppmv must be marked and remediated pursuant to section 94569 (a) (1)."

According to NIOSH and the American Conference of Governmental Industrial Hygienists (ACGIH), the Time Weighted Average (TWA) for methane is 1,000 ppmv over an 8-hour work period. According to NIOSH, methane can be an acute hazard due to being extremely flammable, explosive and a potential asphyxiant. Therefore, confined spaces and areas of potential accumulation, such as within buildings, can be of significant concern.

In the California Department of Toxic Substance Control (DTSC) guidance *Evaluation of Biogenic Methane,* (March 28, 2018), an acceptable methane gas concentration of 500 ppmv was established for indoor air. For methane in soil gas, an acceptable level can be calculated using site-specific information including pressure, as "only pressurized methane soil gas can achieve explosive concentrations in building space…" For example, a methane soil gas concentration of 5,000 ppmv would require a soil gas pressure of 2,000 inches of water (i.w.) to intrude into indoor air resulting in a concentration of 500 ppmv; for methane soil gas concentration at 1,000,000 ppmv (100%) a pressure of only 10 i.w. would be required to have the same effect resulting in 500 ppmv in indoor air.

The County and City of Los Angeles have established building codes as a means to control methane hazards for the development or remodeling of buildings near abandoned wells and landfills. These requirements are for the protection of new buildings or structures and are not applicable at this time.

Other than the potential hazards associated with methane gas accumulation and the CalGem requirements, there do not appear to be any specific soil gas screening levels for methane except for those under development.

3 SITE INVESTIGATION AND ANALYTICAL RESULTS

SUBSURFACE UTILITIES CLEARANCE

As required by law, SCS contacted Underground Service Alert prior to conducting any subsurface work (Dig Alert Nos. A222491763, A22249771, A22249782, A22249787, A22249805, A22249811, A22249828, A22249841, A22249850, A22249858, A22249861, A22249867, A22249867, and A22249876).

SOIL GAS PROBE INSTALLATION

Under the direction of SCS, on September 12, 2022, H&P Mobile Geochemistry (H&P) installed temporary soil gas probes at twenty locations at depths of approximately 5 feet bgs. Soil gas probe locations are depicted in Appendix A. Note that, of the 29 probes monitored during this assessment, nine probes installed during previous investigation activities and were considered viable for this sampling event. Twenty temporary probes were installed using a direct-push drill rig, which advanced a steel rod to the target depth. The rods were retracted and probes were installed and constructed using new 1/8-inch diameter Nylaflow tubing, with a stainless steel filter placed on the bottom end. The probe tip was set within a 12-inch sand pack, with a minimum of 6 inches of dry bentonite above the sand. A hydrated bentonite seal was placed in lifts above the sand to the ground surface. The Nylaflow tubing, which extended from the surface, was fitted with an airtight valve.

Sampling locations were located within 50 feet of previously-abandoned wellhead locations per the coordinates provided below.

SOIL GAS SAMPLE COLLECTION

Abandoned well testing has been conducted at the Inglewood Oil Field annually since 2009 in accordance with Section E.32 of the Baldwin Hills CSD amendment. Historical summaries through the most recent 2019 report of the Inglewood Oil Field abandoned well testing program can be found

on the CSD Related Plans section of the Inglewood Oil Field website. The list of abandoned wells requiring monitoring as part of this event provided by SPR consisted of:

Map ID	Abandoned Well Name	Year 2022	Basis	Latitude	Longitude
3	STK 3	Resample	SPR	33.994037	-118.360782
7	LAI 1-268	Resample	SPR	33.9956472	-118.3665861
8	LAI 1-2	Scheduled	SPR	33.9936	-118.3649917
11	LAI 1-62	Resample	SPR	33.9935972	-118.3665222
12	LAI 1-235	Resample	SPR	33.993975	-118.3683222
14	LAI 1-69	Scheduled	SPR	33.9977917	-118.3689222
17	BC 14	Resample	SPR	34.001725	-118.3667833
18	LAI 1-37	Resample	SPR	34.0022278	-118.3673944
19	LAI 1-25	Resample	SPR	34.0023083	-118.3685306
20	BC 41	Resample	WS	33.9976972	-118.3617556
24	BC 53	Resample	SPR	33.998625	-118.3596444
25	BC 55	Scheduled	SPR	34.0014472	-118.3618917
31	LAI 1-8	Resample	SPR	34.0031694	-118.3695861
32	LAI 1-27	Resample	SPR	34.0003639	-118.3701972
33	LAI 1-95	Resample	SPR	34.0008083	-118.3691417
35	VRU 188	Scheduled	SPR	34.0059472	-118.3695583
36	VRU 186	Resample	WS	34.0071417	-118.3715306
37	VRU 266	Resample	SPR	34.006289	-118.372753
45	LAI 1-166	Resample	SPR	33.9930028	-118.3656139
46	Vickers 1-52	Scheduled	SPR	34.0032806	-118.3775583
54	VRU-LAI1-LW-203	Scheduled	SPR	34.0046139	-118.3739028
55	Vickers 1-008	Scheduled	SPR	34.0031972	-118.3764472
59	VRU 142A	Scheduled	SPR	34.009975	-118.373475
60	VRU 135	Scheduled	SPR	34.0115028	-118.3737528
67	Vickers 1-105	Resample	SPR	34.0064167	-118.3776972
70	TVIC-26	Scheduled	SPR	34.0080306	-118.3837806
77	T-VIC 12	Scheduled	SPR	34.013225	-118.380225
81	T-VIC 70	Resample	SPR	34.0138361	-118.383975

90	LAI 1-59	Resample	SPR	34.0012806	-118.3719194

Per SPR, It is estimated that ~90% of the abandon well locations are correct and correlate with WellStar.

4 METHANE ASSESSMENT

SCS personnel conducted field monitoring of each well location/gas probe on September 13, 2022, and collected soil gas samples for laboratory analysis from each of the 29 probes on November 15 and 16, 2022. Soil gas sampling was conducted in general accordance with the Advisory – Active Soil Gas Investigations, published by the Regional Water Quality Control Board (RWQCB) and DTSC in July 2015 (the "Soil Gas Advisory"). Each soil gas probe was allowed to equilibrate a minimum of two hours prior to sampling. Following the equilibration period, a pressure measurement was collected and each probe was monitored for methane (CH_4), carbon dioxide (CO_2), and oxygen (O_2) using a GEM™5000 manufactured by CES-Landtec. Prior to field use, the instrument was calibrated using laboratory-certified calibration gas.

Following field monitoring, soil gas samples were collected for laboratory analysis by H&P. A total of twenty-nine soil gas samples were collected and analyzed for methane by EPA Method 8015M and fixed gasses (carbon dioxide, oxygen, and nitrogen) by ASTM D Method 1946. H&P is certified to conducted the specified analyses. Samples were collected into Tedlar bags and immediately transported to the laboratory for analysis. Samples were tracked from the point of collection through laboratory analysis using proper chain-of-custody protocols. Upon completion of sampling activities, the temporary soil gas probes were left in place at each location at the request of SPR.

FIELD MONITORING RESULTS

A summary of field monitoring results is presented in **Table 1**. Field monitoring logs are provided in **Appendix A.**. As shown:

- 22 probes contained methane at concentrations less than 50,000 ppmv.
- Two probes contained methane at concentrations between 50,000 to 100,000 ppmv.
- Three probes contained methane concentrations between 100,000 and 500,000 ppmv.
- Two probes (LAI-166 and LAI 1-37) contained methane concentrations exceeding 500,000 ppmv.
- All probes were at atmospheric pressure or under vacuum. None of the probes had observable positive pressure.

SOIL GAS ANALYTICAL RESULTS

The H&P laboratory report, chain-of-custody documentation, and quality assurance/control (QA/QC) data are included as **Appendix C.** A summary of the analytical results and a comparison to field monitoring results for methane is provided in **Table 1.**

As shown in **Table 1:**

- 15 probes did not contain detectable concentrations of methane (i.e. <10 ppmv.
- One Probe (LAI 1-69) contained detectable methane (14 ppmv) at a concentration below 50 ppmv.
- 3 probes contained detectable concentrations of methane between 50 and 1,000 ppmv.

- 2 probes contained methane at concentrations between 1,000 and 10,000 ppmv.
- 5 probes contained methane at concentrations between 10,000 and 100,000 ppmv.
- 3 probes contained methane at concentrations above 100,000 ppmv (>10%).

QUALITY ASSURANCE AND QUALITY CONTROL

Laboratory analytical reports, with appropriate laboratory quality assurance/quality control (QA/QC) data, are presented in **Appendix C**.

Laboratory QC is conducted as part of the analytical protocol for each method. The QC samples analyzed include method blanks. Method blanks are analyzed to assess the effect of the laboratory environment on the samples. The quality assurance/quality control (QA/QC) portions of laboratory reports for the November 2022 gas samples did not detect any of the constituents of concern in any of the method blanks.

No significant quality control issues were identified with respect to the samples submitted for the September 2022 sampling event and therefore, the data are considered viable and representative of conditions in which the samples were collected.

5 DISCUSSION OF ANALYTICAL RESULTS

As shown in **Table 1,** based on analytical results methane was detected in 14 samples collected from 29 soil gas probes. Thirteen of the soil gas samples contained detectable methane at concentrations exceeding 50 ppmv. Concentrations of methane exceeding 50 ppmv at abandoned oil wells are considered a threshold that triggers the requirement for additional monitoring at these locations for two successive years, until such time as methane is detected at concentrations below 50 ppmv.

Methane was detected at concentrations exceeding 50,000 ppmv (the LEL for methane in air) at locations STK 3, LAI 1-62, BC 14, LAI 1-166, VRU 186, LAI 1-37, and Vickers 1-105 during the November 2022 sampling event. Pressure readings collected at these locations during this sampling event were recorded between 0.0 and negative 1.1 i.w. Using the DTSC guidance for evaluating biogenic methane, positive pressure of over 10 i.w. would be required for the concentration of methane detected during this sampling event to result in build-up of methane in confined spaces or buildings. With respect to other regulatory limits, most regulations for methane are associated with the emission of methane to ambient air and/or its accumulation within confined spaces and structures. These regulatory limits do not necessarily apply to this study. Therefore, using the DTSC guidance, the concentration of methane detected during this evaluation are not considered hazardous. In addition to annual monitoring, SPR staff conduct methane sampling and monitoring on an approximate monthly basis at locations with elevated methane concentrations. Readings are collected above ground surface using a combustible gas meter. SPR continues to investigate the cause of the high readings. Additionally, the Los Angeles County Department of Regional Planning (LACDRP) inspector is checking these locations with a gas meter during their inspections several times per year. During the LACDRP inspections, methane/hydrocarbons have not been detected at the surface. This information further supports that no hazardous exposure exists at or above the ground surface to field personnel or the local community.

Well abandonment records are on file at SPR and are also available at CalGEM's website; all were abandoned after 1986 according to updated well abandonment standards and verified in the field by CalGEM representatives. Generally, all records indicate that the wells were plugged with concrete from approximately 8 to 10 feet bgs to depths greater than 1,000 feet bgs.

6 CONCLUSIONS AND RECOMMENDATIONS

SCS conducted annual methane monitoring at the Inglewood Oil Field for 2022, with monitoring conducted on September 13 and November 15 and 16. The objective of the soil-gas monitoring was to determine if abandoned wells at the Inglewood Oil Field are found to be leaking hydrocarbons that could affect health and safety.

Based on the analytical results, it is SCS' recommendation that the abandoned well locations with methane detections exceeding 50 ppmv be resampled during the annual soil gas monitoring event in summer 2023.

Thirteen of the soil gas samples contained detectable methane at concentrations exceeding 50 ppmv. Further evaluation and monitoring of these wells is recommended during the next annual monitoring event.

7 REFERENCES

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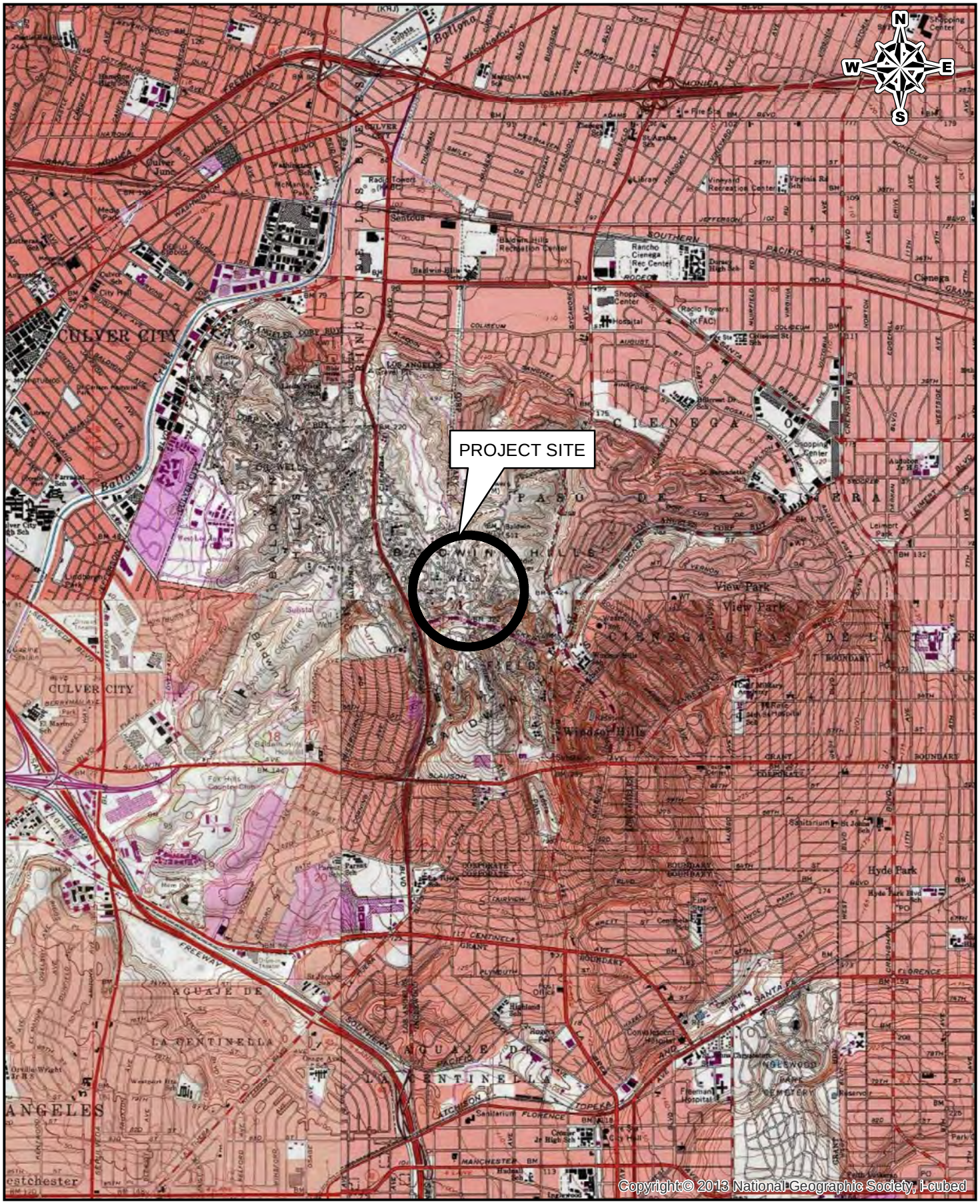
Figure 1

Site Location Map



0 1,000 2,000
Feet

SCS ENGINEERS
3900 KILROY AIRPORT WAY, STE 100
LONG BEACH, CALIFORNIA 90806-6816

SITE:
Inglewood Oil Field
Los Angeles County, California

Job No.: 01219202.00

Title: SITE LOCATION MAP

FIGURE
1

Table 1

Summary of Analytical Results for Soil Gas Samples

Table 1
Summary of Analytical Results for Soil Gas Samples
Inglewood Oil Field
5640 South Fairfax Avenue
Los Angeles, California 90056

Sample Number (or Boring ID)[1]	Sampling Date	Soil Vapor Sample Results				
		Carbon Dioxide	Oxygen	Nitrogen	Methane	GEM Readings (H&P)
		Percent by Volume (% VOL.) ASTM D1945			Parts per million by volume (ppmv) EPA Method 8015M	ppmv
STK 3	November 15, 2022	13	4.4	72	**95,000**	146,000*
LAI 1-62	November 15, 2022	9.2	2.5	55	**410,000**	445,000*
BC 14	November 15, 2022	17	1.7	73	**64,000**	2,000*
LAI 1-8	November 16, 2022	2.7	18	79	<10	3,000*
LAI 1-166	November 15, 2022	3.9	1.9	10.0	**840,000**	971,000*
Vickers 1-008	November 15, 2022	0.46	21	78	<10	5,000*
BC 53	November 15, 2022	1.5	20	78	<10	2,000*
BC 55	November 15, 2022	3.0	18	79	<10	1,000*
LAI 1-2	November 15, 2022	2.7	19	78	<10	3,000*
VRU 266	November 16, 2022	6.1	10	84	**2,100**	94,000*
VRU 186	November 16, 2022	1.8	16	74	**65,000**	409,000*
VRU-LAI1-LW-203	November 15, 2022	1.8	19	79	<10	11,000*
VRU 188	November 15, 2022	5.8	16	78	<10	5,000*
LAI 1-27	November 15, 2022	12	2.2	85	**990**	20,000*
LAI 1-95	November 15, 2022	1.9	19.0	79	**200**	1,000*
VRU 135	November 15, 2022	1.1	20	78	**52**	4,000*
VRU 142A	November 15, 2022	3.0	19	78	<10	6,000*
T-VIC 12	November 15, 2022	1.2	20	79	<10	4,000*
T-VIC 26	November 15, 2022	0.50	21	79	<10	4,000*
T-VIC 70	November 15, 2022	2.1	19	79	<10	4,000*
LAI 1-235	November 15, 2022	9.2	11	79	<10	50,000*
LAI 1-268	November 15, 2022	23	2.2	71	**27,000**	41,000*
LAI 1-37	November 16, 2022	20	3.2	42	**390,000**	715,000*
LAI 1-25	November 16, 2022	11	10	78	<10	1,000*

Sample Number (or Boring ID)[1]	Sampling Date	Soil Vapor Sample Results				
		Carbon Dioxide	Oxygen	Nitrogen	Methane	GEM Readings (H&P)
		Percent by Volume (% VOL.) ASTM D1945			Parts per million by volume (ppmv) EPA Method 8015M	ppmv
Vickers 1-105	November 15, 2022	8.6	12	71	**74,000**	50,000*
Vickers 1-52	November 15, 2022	5.2	16	78	<10	5,000*
BC 41	November 15, 2022	7.4	15	78	<10	4,000*
LAI 1-69	November 16, 2022	0.77	20	79	**14**	4,000*
LAI 1-59	November 15, 2022	19	2.1	79	**6,400**	11,000*

Notes:

bgs = below ground surface

[1] = Sample designation provied by Sentinel Peak Resources

* = Field monitoroing conducted on September 13, 2022

Appendix A

Sample Location Map and Field Data Sheets

SENTINEL PEAK RESOURCES LLC

INGLEWOOD, 2022 ABANDONED WELL SOIL-GAS TEST LOCATIONS

Legend

- RESAMPLE
- SCHEDULED

Norman O. Houston Park
Windsor Hills Elementary School
Windsor Hills Community Chu
Dr. Martin Luther King, Jr. Memorial Tree Grove
Kenneth Hahn Disc Golf Course
Kenneth Hahn Hummingbird Garden
BC 53
BC 55
S La Brea Ave
BC 41
STK 3
Glenford St
Kenneth Hahn Park - Playground
Kenneth Hahn Lower Park
Kenneth Hahn State Recreation Area
Doris Japanese Garden
S Fairfax Ave
LAI 1-37
BC 14
VRU 188
LAI 1-25
VRU 186
Inglewood Gas Plant
LAI 1-95
VRU 135
VRU 142A
La Cienega Blvd
VRU 266
LAI 1-27
LAI 1-69
LAI 1-268
LAI1-2
LAI 1-166
LAI 1-62
AYSO - Kenneth Hahn Soc
Ladera Little League
Wrightcrest Dr
Blairstone Dr
Stoneview Nature Center
LAI 1-59
LAI 1-235
VRU-LAI1_LW-203
T-VIC 12
Vickers 1-105
Inglewood Oil Field
Vickers 1-008
Vickers 1-12
Vickers 1-52
T-VIC 70
Boneyard Dog Park
Vickers 2-4 TVIC-26
College Blvd
Sophomore Dr
Star Eco Station
Marycrest Manor
Charlton Ave
S Holt Ave
Bedford Ave
S Sherbourne Dr
Shenandoah Ave
Mrs. Washington's Childcare
Kindred Hospital Los Angeles
24 Ho
N
2000 ft
Google Earth

Mobile Geochemistry Inc.

Log Sheet: Vapor Probe Installation

FMS002
Revision: 1
Revised: 12/4/14
Effective: 1/1/15
Page 1 of 1

H&P Project #: SCS091322-SP10/LAN
Date: 9-13-22
Site Address: 5640 S. FAIRFAX AVE, LOS ANGELES
Page: 1 of 2
Consultant: SCS
H&P Rep(s): J. VANDERWAL
Reviewed:
Consultant Rep(s): SAT VARGAS
Scanned:

	Point ID	Date	Time Placed	Probe Depth (ft)	Tubing Length (ft)	Sand Pack Ht (in.)	Sand Pack Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Filter Type: Air stone	Filter Type: SS Implant	Tubing (Nylaflow, Teflon, Stainless Steel): 1/8" OD	Tubing: 1/4" OD	Tubing: N	Tubing: T	Tubing: SS	Probe Termination: 1-way Valve	Probe Termination: Swagelok 1/8"	Probe Termination: Swagelok 1/4"	Date Probe Abandoned	Field Notes: (Surface cover, moisture, DPT equipment used, PRT sampling, refusals, well box size, concrete dia, etc.)
1	STK 3	9/13	0754	5	7	12	1.5	6	1.5	X		X		X			X			NA	Soil, DPT
2	CA1-235		0824	5	7	12	1.5	6	1.5	X		X		X			X				
3	CA1-67		0848	5	7	12	1.5	6	1.5	X		X		X			X				
4	CA11-2		0904	5	7	12	1.5	6	1.5	X		X		X			X				
5	BC 55		0930	5	7	12	1.5	6	1.5	X		X		X			X				
6	BC 41		0946	5	7	12	1.5	6	1.5	X		X		X			X				
7	CA1 1-95		1002	5	7	12	1.5	6	1.5	X		X		X			X				
8	CA11-25		1013	5	7	12	1.5	6	1.5	X		X		X			X				
9	VRU 186		1025	5	7	12	1.5	6	1.5	X		X		X			X				
10	VRU 266		1042	5	7	12	1.5	6	1.5	X		X		X			X				
11	VRU CA1-CW203		1059	5	7	12	1.5	6	1.5	X		X		X			X				
12	VRU 142A		1113	5	7	12	1.5	6	1.5	X		X		X			X				
13	VRU 135		1125	5	7	12	1.5	6	1.5	X		X		X			X				
14	TVIC 12		1147	5	7	12	1.5	6	1.5	X		X		X			X				
15	TVIC 76	←	1249	5	7	12	1.5	6	1.5	X		X		X			X			—	—

Site Notes (e.g. weather, visitors, scope deviations, health & safety issues, broken/unrecovered tools, etc.):

H&P Mobile Geochemistry Inc.

Log Sheet: Vapor Probe Installation

FMS002
Revision: 1
Revised: 12/4/14
Effective: 1/1/15
Page 1 of 1

H&P Project #: SCSOG1322-SP10/CAN
Site Address: 5640 S. FAIRFAX AVE. LOS ANGELES
Consultant: SCS
Consultant Rep(s): JAY VARGAS

Date: 9-13-22
Page: 2 of 2
H&P Rep(s): J. VANDERWAL

Reviewed:
Scanned:

	Point ID	Date	Time Placed	Probe Depth (ft)	Tubing Length (ft)	Sand Pack Ht (in.)	Sand Pack Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Filter Type		Tubing (Nylaflow, Teflon, Stainless Steel)					Probe Termination			Date Probe Abandoned	Field Notes: (Surface cover, moisture, DPT equipment used, PRT sampling, refusals, well box size, concrete dia, etc.)
										Air stone	SS Implant	1/8" OD	1/4" OD	N	T	SS	1-way Valve	Swagelok 1/8"	Swagelok 1/4"		
1	VICKERS 1-52	9/13	1304	5	7	12	1.5	6	1.5	X		X		X			X			NA	SOIL, DPT
2	VICKERS 1-008		1315	5	7	12	1.5	6	1.5	X		X		X			X				
3	CAI 1-59		1340	5	7	12	1.5	6	1.5	X		X		X			X				
4	CAI 1-69		1431	5	7	12	1.5	6	1.5	X		X		X			X				
5	CAI 1-8		1445	5	7	12	1.5	6	1.5	X		X		X			X				
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Site Notes (e.g. weather, visitors, scope deviations, health & safety issues, broken/unrecovered tools, etc.):

H&P Mobile Geochemistry Inc.

Log Sheet: Landtec Meter

H&P Project #: SCS09137E-STD/LAN
Site Address: 5640 FAIRFAX AVE, LOS ANGELES, CA
Consultant: SCS
Consultant Rep(s): S. VARGAS

Date: 7/13/22
Page: 1 of 3
H&P Rep(s): S. VANDERHAM
Reviewed:
Scanned:

Landtec GEM 5000 Calibration						
	Time	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)
Calibration Standard	n/a	15	15	4	70	n/a
Opening Calibration	0830	15	15	3.9	71.0	29.62
Closing Calibration	1630	15	14.9	4.0	70	29.51
Acceptable Range	n/a	13.5 - 16.5	13.5 - 16.5	2.5 - 5.5	55 - 85	n/a

LADBS Certification Info
Methane Testing License #10231
Instrument: Landtec GEM 5000
Instrument Accuracy: ±1.5% CH_4
Landtec Equipment ID#: 022
Manometer ID#:

	Point ID	Sample Time	Probe Depth (ft)	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)	Probe Pressure ("H_2O)	Field Notes
1	LA1 1-166	0848	5'	97.1	2.9	0.1		29.62	Ø	
2	LA1 1-62	0920	5'	44.5	10.5	0.2		29.58	-1.1	
3	LA1 1-268	0935	5'	4.1	27.8	Ø		29.56	Ø	
4	BC14	0950	5'	0.2	7.3	13.1		29.59	-0.8	
5	LA1 1-37	1010	5'	71.5	25.3	0.7		29.58	-0.5	
6	LA1 1-27	1025	5'	2.0	16.1	Ø		29.58	Ø	
7	VICKERS 1-105	1045	5'	5.0	12.7	12.9		29.52	Ø	
8	BC53	1140	5'	0.2	2.4	18.6		29.39	Ø	
9	BC55	1200	5'	0.1	3.2	17.5		29.39	Ø	
10	LA1 1-25	1219	5'	0.1	2.4	14.2		29.57	Ø	

Site Notes (e.g. weather, visitors, scope deviations, health & safety issues, etc.):

H&P Mobile Geochemistry Inc.

FMS009
Revision: 6
Revised: 8/27/2020
Effective: 8/27/2020
Page 1 of 1

Log Sheet: Landtec Meter

H&P Project #: SCS01377-SP10/CAN
Date: 9/13/22
Site Address: 5690 FAIRFAX AVE., LOS ANGELES, CA
Page: 2 of 5
Consultant: SCS
H&P Rep(s): S VANDEVAAR
Reviewed:
Consultant Rep(s): J. VARGAS
Scanned:

Landtec GEM 5000 Calibration

	Time	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)
Calibration Standard	n/a	15	15	4	70	n/a
Opening Calibration	0830	15	15	3.9	71.0	29.62
Closing Calibration	1630	15	14.9	4.0	70	29.51
Acceptable Range	n/a	13.5 - 16.5	13.5 - 16.5	2.5 - 5.5	55 - 85	n/a

LADBS Certification Info

Methane Testing License #10231
Instrument: Landtec GEM 5000
Instrument Accuracy: ±1.5% CH_4
Landtec Equipment ID#: 022
Manometer ID#:

	Point ID	Sample Time	Probe Depth (ft)	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)	Probe Pressure ("H_2O)	Field Notes
1	LA I-95	1230	5'	0.1	2.2	18.1		29.57	Ø	
2	VRU 186	1246	5	40.9	16	Ø		29.57	Ø	
3	VRU 266	1259	5	9.4	8.9	17.3		29.54	Ø	
4	VRU-LA I-LW-203	1315	5	1.1	1.8	16.4		29.55	Ø	
5	VRU 142A	1330	5	0.6	3.5	17.5		29.55	Ø	
6	T-VIC 12	1357	5	0.4	0.7	19.4		29.53	-0.5	
7	T-VIC 70	1407	5	0.4	9.4	9.0		29.53	Ø	
8	T-VIC 26	1417	5	0.4	1.5	20.1		29.53	Ø	
9	VICKERS 1-52	1431	5	0.5	4.5	15.4		29.57	Ø	
10	VICKERS 1-008	1444	5	0.5	2.9	18.7		29.57	Ø	

Site Notes (e.g. weather, visitors, scope deviations, health & safety issues, etc.):

H&P Mobile Geochemistry Inc.

FMS009
Revision: 6
Revised: 8/27/2020
Effective: 8/27/2020
Page 1 of 1

Log Sheet: Landtec Meter

H&P Project #: SCS01522-SP10/CAN
Date: 09/13/22
Site Address: 5640 FAIRFAX AVE., LOS ANGELES, CA
Page: 3 of 3
Consultant: SCS
H&P Rep(s): J. VANDEMAR
Reviewed:
Consultant Rep(s): J. VARGAS
Scanned:

Landtec GEM 5000 Calibration

	Time	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)
Calibration Standard	n/a	15	15	4	70	n/a
Opening Calibration	0830	15	15	3.9	71.0	29.62
Closing Calibration	1630	.5	14.9	4.0	70.0	29.51
Acceptable Range	n/a	13.5 - 16.5	13.5 - 16.5	2.5 - 5.5	55 - 85	n/a

LADBS Certification Info

Methane Testing License #10231
Instrument: Landtec GEM 5000
Instrument Accuracy: ±1.5% CH_4
Landtec Equipment ID#: 022
Manometer ID#:

	Point ID	Sample Time	Probe Depth (ft)	CH_4 (%)	CO_2 (%)	O_2 (%)	N_2 (%)	Barometric Pressure ("Hg)	Probe Pressure ("H_2O)	Field Notes
1	LA1 1-59	1449	5'	1.1	8.7	2.6		29.53	Ø	
2	VZU 188	1458	5'	0.5	6.4	14.5	78.8	29.63	Ø	
3	VZU 135	1515	5	0.4	0.6	19.4	79.6	29.63	Ø	
4	BC 41	1525	5'	0.4	5.8	13.3	80.4	29.47	Ø	
5	STK3	1935	5'	14.6	14.5	0.6	70.0	29.53	Ø	
6	LA1 1-69	1545	5'	0.4	6.6	11.3	80.8	29.61	Ø	
7	LA1 1-735	1555	5'	5.0	17.3	0.1	77.4	29.63	Ø	
8	LA1 1-2	1559	5'	0.3	7.6	16.6	80.4	29.51	Ø	
9	LA1 1-8	1622	5'	0.3	4.4	14.5	80.8	29.51	Ø	
10										

Site Notes (e.g. weather, visitors, scope deviations, health & safety issues, etc.):

Appendix B

Historical Abandoned Well Soil Gas Results, 2009 to Present

SENTINEL PEAK RESOURCES LLC

ABANDONED WELL SOIL GAS TESTING RESULTS, 2009 TO 2022

Map ID Number	Well Name	METHANE MONITORING RESULTS (ppmv)														
		2009 to 2013 / 5-YEAR CYCLE					2014 TO 2018 5-YEAR CYCLE					2019 TO 2023 5-YEAR CYCLE				
		Yr: 2009	Yr: 2010	Yr: 2011	Yr: 2012	Yr: 2013	Yr: 2014	Yr: 2015	Yr: 2016	Yr: 2017	Yr: 2018	Yr: 2019	Yr. 2020	Yr. 2021	Yr. 2022	Yr. 2023
1	STK 1	8.7	11.2								-	-	-	-		
1	STK 27	-	-	213.0	15.4	5.5	-	-	-	-	-	-	-	-		Schedule
2	STK 11	70.5	494.0	1.8	25.5	11.3	-	-	-	-	18	-	-	-		Schedule
3	STK 3	21.2	268.0	30.6	51.9	10.2	31.8	-	-	-	44	210,000	180,000	62,000	95,000	Resample
4	BC 61	3.8	10.5	-	-	-	-	3.2	-	-	-	-	< 10	-		
5	BC 321	577.0	9.8	1.3	-	-	-	-	0.9	-	-	-	-	< 10		
6	BC 11	2.6	7.8	-	-	-	-	2.9	-	-	-	-	< 10	-		
7	LAI 1-268	4.0	6.3	-	-	-	-	2.6	-	-	-	-	17,000	19,000	27,000	Resample
8	LAI 1-122	41.9	4.1							-	18	-	-	-		
8	LAI1-2	-	-	1,346.0	23.4	7.2	-	-	-	-	-	-	-	-	< 10	Schedule
9	LAI 1-254	5.9	22.6	-	-	-	-	10.4	-	-	-	-	< 10	-		
10	LAI 1-253	2.2	8.2							-	20	-	-	-		
10	LAI1-258	-	-	124.0	25.2	37.4	-	-	-	-	-	-	-	-		Schedule
11	LAI 1-62	2.5	7.2	-	-	-	-	254	12.1	170	23	360,000	251,000	250,000	410,000	Resample
12	LAI 1-235	1.0	13.1	-	-	-	-	1.5	-	-	-	-	260	4,700	< 10	Resample
13	LAI 1-171	96.7	10.5	5.3	-	-	-	-	1.2	-	-	-	-	< 10		
14	LAI 1-69	13.1	14.9							-	-	-	-	-	14	
14	LAI1-14	-	-	4.8	19.5	-	-	-	-	0	-	-	-	-		
15	LAI 1-206	174.0	2.5	0.8	-	-	-	-	1.2	-	-	-	-	11		
16	BC 12	230.0	7.2	1.5	-	-	-	-	14.2	-	-	-	-	< 10		
17	BC 14	4.9	4.1	-	-	-	-	127	1.1	250	10,000	< 18	3,100	< 10	64,000	Resample
18	LAI 1-37	7.3	7.0	-	-	-	-	4.3	-	-	-	-	42,000	23,000	390,000	Resample
19	LAI 1-25	4.2	799.0	1.9	8.6	-	-	-	-	<0.0020	-	-	-	-	< 10	
20	BC 41	4.5	3.2	-	-	-	-	1.5	-	-	-	-	1,500	< 10	< 10	
21	BC 71	3.7	5.6	-	-	-	-	2.1	-	-	-	-	15	-		
22	BC 22	111.0	4.8	1.5	-	-	-	-	47.4	-	-	-	-	< 10		
23	BC 333	5.8	3.5	-	-	-	-	2.3	-	-	-	-	19	-		
24	BC 53	5.1	4.3	-	-	-	-	4.6	-	-	-	-	54	< 10	< 10	
25	BC 55	123.0	938.0	0.6	21.1	-	-	-	-	0	-	-	-	-	< 10	
26	BC 36	4.3	13.9	-	-	-	-	3.4	-	-	-	-	< 10	-		
27	BC 24	5.8	0.3	-	-	-	-	3.4	-	-	-	-	11	-		
28	BC 105	2.6	1.8	-	-	-	-	1.9	-	-	-	-	11	-		
29	BC 27	4.3	5.2	-	-	-	-	3.8	-	-	-	-	11	-		
30	LAI 1-18	8.4	9.0	-	-	-	-	4.0	-	-	-	-	< 10	-		
31	LAI 1-8	6.5	611.0	26.0	257.0	13.8	29.4	-	-	-	-	9,100	7,500	980	< 10	Resample
32	LAI 1-27	10.3	16.3	-	-	-	-	4.9	-	-	-	-	9,100	2,100	990	Resample
33	LAI 1-95	5.8	483.0	2.0	11.9	-	-	-	-	0	-	-	-	-	200	Resample
34	LAI 1-182**	5.8	4.2	1.7	-	-	-	6.7	-	-	-	-	< 10	-		
35	VRU 188	4.4	13.6						-	-	22	-	-	-	< 10	Schedule
35	LAI1-21	-	-	8.5	40.4	-	-	-	-	290	-	1,300	< 10	-		
36	VRU 186	5.5	24.7	-	-	-	-	3.5	-	-	-	-	61,000	5,300	65,000	Resample
37	VRU 266	47.0	10.4	-	-	-	-	3.1	-	-	-	-	35,000	1,400	2,100	Resample
38	VRU-190	6.9	11.3	-	-	-	-	3.9	-	-	-	-	15	-		
39	LAI 1-12	8.8	8.5	-	-	-	-	3.9	-	-	-	-	< 10	-		
40	Vickers 1-90	4.4	8.9	-	-	-	-	2.6	-	-	-	-	< 10	-		
41	Vickers 1-52	5.3	17.3	-	-	-	-	1.9	-	-	-	-	-	-		
42	LAI 1-150	4.7	3.7	-	-	-	-	3.8	-	-	-	-	< 10	-		
43	LAI 1-286	5.1	10.9	-	-	-	-	2.2	-	-	-	-	< 10	-		
44	LAI 1-256	21.2	6.4	-	-	-	-	4.1	-	-	-	-	< 10	-		
45	LAI 1-166	32.7	2,108.0	114.0	113.0	43.2	13.2	-	-	-	-	830,000	620,000	350,000	1,200,000	Resample
46	Vickers 1-12	5.6	3.4						-	-	-	-	-	-	-	
46	Vickers 1-52	-	-	5.6	4.3	-	-	-	-	0	-	-	< 10	-	< 10	
47	Vickers 1-65	5.4	3.8	-	-	-	-	5.6	-	-	-	-	< 10	-		
48	Vickers 1-18	5.0	5.7	-	-	-	-	3.8	-	-	-	-	< 10	-		
49	TVIC 53	4.8	4.1	-	-	-	-	3.9	-	-	-	-	< 10	-		
50	TVIC 45	6.2	4.3	-	-	-	-	1.6	-	-	-	-	< 10	-		
51	Vickers 2-11	3.5	2.5	-	-	-	-	0.8	-	-	-	-	< 10	-		
52	Vickers 2-15	10.7	5.7	-	-	-	-	3.1	-	-	-	-	< 10	-		
53	Vickers 2-37	2.4	775.0	551.0	6.1	12.8	-	-	-	-	24	-	-	-		Schedule

SENTINEL PEAK RESOURCES LLC

ABANDONED WELL SOIL GAS TESTING RESULTS, 2009 TO 2022

Map ID Number	Well Name	METHANE MONITORING RESULTS (ppmv)														
		2009 to 2013 / 5-YEAR CYCLE					2014 TO 2018 5-YEAR CYCLE					2019 TO 2023 5-YEAR CYCLE				
		Yr: 2009	Yr: 2010	Yr: 2011	Yr: 2012	Yr: 2013	Yr: 2014	Yr: 2015	Yr: 2016	Yr: 2017	Yr: 2018	Yr: 2019	Yr. 2020	Yr. 2021	Yr. 2022	Yr. 2023
54	LAI 1-9	2.7	12.9						-	-	-	-	-	-		
54	VRU-LAI1-LW-	-	-	13.1	16.9	-	-	-	-	<0.0020	-	-	-	-	< 10	
55	Vickers 1-008	3,627.0	2,468.0	1.8	4.2	-	-	-	-	70	25	< 18	-	-	< 10	
56	VRU 158	6.3	6.1	-	-	-	-	1.5	-	-	-	-	< 10	-		
57	VRU 173	9.7	10.4	-	-	-	-	1.4	-	-	-	-	< 10	-		
58	WRZU 312	1,784.0	3.9	3.8	-	-	-	-	1.0	-	-	-	-	< 10		
59	VRU 142A	3.5	79.1	2.1	46.7	-	-	-	-	<0.0020	-	-	-	-	< 10	
60	VRU 135	3.8	108.0	2.0	7.2	-	-	-	-	0	-	-	-	-	52	Resample
61	VRU 133	2.2	7.1	-	-	-	-	2.7	-	-	-	-	< 10	-		
62	VRU 137	7.6	4.5	-	-	-	-	2.7	-	-	-	-	< 10	-		
63	Dabney 6A	4.4	14.3	-	-	-	-	13.3	-	-	-	-	< 10	-		
64	Dabney 3	11.5	8.7	-	-	-	-	3.0	-	-	-	-	< 10	-		
65	VRU 103	6.6	43.5						-	-	23	-	-	-		
65	TVIC-3	-	-	88.3	8.9	18.2	-	-	-	-	-	-	-	-		Schedule
66	VRU 153	2.5	6.4	-	-	-	-	1.5	-	-	-	-	< 10	-		
67	Vickers 1-105	2.6	5.2	-	-	-	-	3.5	-	-	-	-	52,000	180,000	74,000	Resample
68	Vickers 1-9	4.1	3.0	-	-	-	-	1.1	-	-	-	-	< 10	-		
69	T-VIC 43	2.8	1.9	-	-	-	-	3.5	-	-	-	-	< 10	-		
70	Vickers 2-4	3.0	5.3						-	-	-	-	-	-	-	
70	TVIC-26	-	-	4.7	2.0	-	-	-	-	<0.0026	-	-	-	-	< 10	
71	Vickers 1-5	3.6	6.4	-	-	-	-	1.2	-	-	-	-	< 10	-		
72	T-VIC 9	1.3	3.0	-	-	-	-	3.9	-	-	-	-	< 10	-		
73	Vickers 2-1	3.1	8.7	-	-	-	-	3.6	-	-	-	-	< 10	-		
74	T-VIC 31	2.6	5.9						-	-	25	< 18	-	-		
74	TVIC-42	-	-	223.0	3.8	6.9	-	-	-	-	-	-	-	-		Schedule
75	T-VIC 15	16.8	4.1	-	-	-	-	2.0	-	-	-	-	< 10	-		
76	T-VIC 14	2.1	14.4	-	-	-	-	8.0	-	-	-	-	< 10	-		
77	T-VIC 12	1.6	95.9	1.7	3.7	-	-	-	-	<0.0020	-	-	-	-	< 10	
78	VRU 128	1.6	1.9	-	-	-	-	0.5	-	-	-	-	< 10	-		
79	VRU 125	2,661.0	5.3	18.1	-	-	-	-	1.2	-	-	-	-	< 10		
80	BC 18	1,236.0	12.9	90.2	92.8	14.1	4.3	-	-	-	-	66	-	-		
81	T-VIC 70	3.6	6.6	-	-	-	-	0.6	-	-	-	-	170	49	< 10	
82	Vickers 2-5	3.5	12.0	-	-	-	-	9.2	-	-	-	-	< 10	-		
83	LAI 1-13	28.6	8.7	-	-	-	-	3.8	-	-	-	-	< 10	-		
84	LAI 1-63	4.8	7.2	-	-	-	-	2.9	-	-	-	-	< 10	-		
85	LAI 1-65	2.9	3.8	-	-	-	-	4.7	-	-	-	-	< 10	-		
86	Sentous 3	7.3	8.9	-	-	-	-	6.3	-	-	-	-	< 10	-		
87	LAI 1-180	25.2	9.2	-	-	-	-	4.3	-	-	-	-	< 10	-		
88	LAI 1-32	11.6	6.6	-	-	-	-	3.1	-	-	-	-	< 10	-		
89	LAI 1-281	2.2	5.2	-	-	-	-	2.5	-	-	-	-	< 10	-		
90	LAI 1-59	3.4	7.4	-	-	-	-	4.7	-	-	-	-	11,000	8,500	6,400	Resample
91	LAI 1-28	29.8	6.6	-	-	-	-	4.7	-	-	-	-	< 10	-		
92	Vickers 1-43	3.5	15.5	-	-	-	-	10.7	-	-	-	-	< 10	-		
93	Vickers 1-25	4.5	9.1	-	-	-	-	2.5	-	-	-	-	< 10	-		
94	LAI 1-169	5.6	4.5	-	-	-	-	2.4	-	-	-	-	< 10	-		
95	LAI 1-110	2.9	9.8	-	-	-	-	1.7	-	-	-	-	< 10	-		
96	Vickers 1-55	1.2	7.3						-	-	-	-	-	-		
Total Sampled		96	96	31	23	11	4	65	9	9	11	6	69	23	31	23
# > 50 ppmv methane		11	12	8	4	-	-	2	-	4	1	6	16	12	13	TBD

[1] > 50 Sample results greater than 50 ppmv methane.

[2] Scheduled = Map ID and/or abandon well locations are scheduled, at a minimum, on a 5 year rotation basis.

[3] Resample = If a test location exceeds 50 ppmv methane, it must be retested the following two years to affirm < 50 ppmv methane. Additionally, outcomes of sampling and/or laboratory quality control (QC) may necessitate resampling.

Appendix C

H&P Laboratory Report

Mobile
Geochemistry Inc.

21 December 2022

Jeff Sieg
SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

H&P Project: SCS111622-11 REV1
Client Project: Inglewood Oil Field

Dear Jeff Sieg:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 11/16/2022-11/17/2022which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Kristin Beckley for:
Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H& P is approved as an Environmental Testing Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency . Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/about/certifications. Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.

H&P Mobile
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SCS Engineers - Long Beach	Project: SCS111622-11 REV1	
3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BC 41	E211042-01	Vapor	15-Nov-22	16-Nov-22
BC 53	E211042-02	Vapor	15-Nov-22	16-Nov-22
BC 55	E211042-03	Vapor	15-Nov-22	16-Nov-22
BC 14	E211042-04	Vapor	15-Nov-22	16-Nov-22
LAI-1-95	E211042-05	Vapor	15-Nov-22	16-Nov-22
LAI 1-27	E211042-06	Vapor	15-Nov-22	16-Nov-22
VRU-188	E211042-07	Vapor	15-Nov-22	16-Nov-22
VRU 142A	E211042-08	Vapor	15-Nov-22	16-Nov-22
LAI 1-59	E211042-09	Vapor	15-Nov-22	16-Nov-22
VICKERS 1-008	E211042-10	Vapor	15-Nov-22	16-Nov-22
VICKERS 1-52	E211042-11	Vapor	15-Nov-22	16-Nov-22
T-VIC 12	E211042-12	Vapor	15-Nov-22	16-Nov-22
T-VIC 70	E211042-13	Vapor	15-Nov-22	16-Nov-22
T-VIC 26	E211042-14	Vapor	15-Nov-22	16-Nov-22
VICKERS 1-105	E211042-15	Vapor	15-Nov-22	16-Nov-22
LAI 1-2	E211042-16	Vapor	15-Nov-22	16-Nov-22
LAI 1-268	E211042-17	Vapor	15-Nov-22	16-Nov-22
LAI 1-235	E211042-18	Vapor	15-Nov-22	16-Nov-22
LAI 1-166	E211042-19	Vapor	15-Nov-22	16-Nov-22
LAI-1-62	E211042-20	Vapor	15-Nov-22	16-Nov-22
STK3	E211042-21	Vapor	15-Nov-22	16-Nov-22
VRU-LAI 1-LW-203	E211042-22	Vapor	15-Nov-22	16-Nov-22
VRU-135	E211042-23	Vapor	15-Nov-22	16-Nov-22
LAI 1-8	E211046-01	Vapor	16-Nov-22	17-Nov-22
LAI 1-37	E211046-02	Vapor	16-Nov-22	17-Nov-22
LAI 1-25	E211046-03	Vapor	16-Nov-22	17-Nov-22
VRU 266	E211046-04	Vapor	16-Nov-22	17-Nov-22
VRU 186	E211046-05	Vapor	16-Nov-22	17-Nov-22

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3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LAI 1-69	E211046-06	Vapor	16-Nov-22	17-Nov-22

12/21/22 Revision

Results for sample LAI 1-166 have been revised to report methane concentrations by method ASTM D1945 (TCD) instead of the originally reported method due to the presence of elevated methane that exceeded the detector range and accurate dilution range of the EPA 8015M (FID) method. All other originally reported results are within method acceptance criteria (+/- 15% for individual fixed gases and total summed components).

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Soil Vapor/Air Analysis by ASTM D1945

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
BC 41 (E211042-01) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**7.4**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**15**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
BC 53 (E211042-02) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**1.5**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
BC 55 (E211042-03) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**3.0**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**18**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
BC 14 (E211042-04) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**17**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**1.7**	0.20	"	"	"	"	"	"	
Nitrogen	**73**	0.20	"	"	"	"	"	"	
LAI-1-95 (E211042-05) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**1.9**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
LAI 1-27 (E211042-06) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**12**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**2.2**	0.20	"	"	"	"	"	"	
Nitrogen	**85**	0.20	"	"	"	"	"	"	

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Soil Vapor/Air Analysis by ASTM D1945

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VRU-188 (E211042-07) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**5.8**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**16**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
VRU 142A (E211042-08) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**3.0**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
LAI 1-59 (E211042-09) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**19**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**2.1**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
VICKERS 1-008 (E211042-10) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**0.46**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**21**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
VICKERS 1-52 (E211042-11) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**5.2**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**16**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
T-VIC 12 (E211042-12) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**1.2**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	

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Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Soil Vapor/Air Analysis by ASTM D1945

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
T-VIC 70 (E211042-13) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**2.1**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
T-VIC 26 (E211042-14) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**0.50**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**21**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
VICKERS 1-105 (E211042-15) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**8.6**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**12**	0.20	"	"	"	"	"	"	
Nitrogen	**71**	0.20	"	"	"	"	"	"	
LAI 1-2 (E211042-16) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**2.7**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
LAI 1-268 (E211042-17) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**23**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**2.2**	0.20	"	"	"	"	"	"	
Nitrogen	**71**	0.20	"	"	"	"	"	"	
LAI 1-235 (E211042-18) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**9.2**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**11**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	

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Soil Vapor/Air Analysis by ASTM D1945

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
LAI 1-166 (E211042-19) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**3.9**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**1.9**	0.20	"	"	"	"	"	"	
Nitrogen	**10**	0.20	"	"	"	"	"	"	
Methane	**84**	1.0	"	"	"	"	"	"	
LAI-1-62 (E211042-20) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**9.2**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**2.5**	0.20	"	"	"	"	"	"	
Nitrogen	**55**	0.20	"	"	"	"	"	"	
STK3 (E211042-21) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**13**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**4.4**	0.20	"	"	"	"	"	"	
Nitrogen	**72**	0.20	"	"	"	"	"	"	
VRU-LAI 1-LW-203 (E211042-22) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**1.8**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
VRU-135 (E211042-23) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Carbon dioxide	**1.1**	0.20	%	1	EK21703	16-Nov-22	16-Nov-22	ASTM D1945	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	

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Soil Vapor/Air Analysis by ASTM D1945

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
LAI 1-8 (E211046-01) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**2.7**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**18**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	
LAI 1-37 (E211046-02) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**20**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**3.2**	0.20	"	"	"	"	"	"	
Nitrogen	**42**	0.20	"	"	"	"	"	"	
LAI 1-25 (E211046-03) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**11**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**10**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
VRU 266 (E211046-04) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**6.1**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**10**	0.20	"	"	"	"	"	"	
Nitrogen	**84**	0.20	"	"	"	"	"	"	
VRU 186 (E211046-05) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**1.8**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**16**	0.20	"	"	"	"	"	"	
Nitrogen	**74**	0.20	"	"	"	"	"	"	
LAI 1-69 (E211046-06) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Carbon dioxide	**0.77**	0.20	%	1	EK21805	17-Nov-22	17-Nov-22	ASTM D1945	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**79**	0.20	"	"	"	"	"	"	

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Soil Vapor/Air Analysis by EPA 8015M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
BC 41 (E211042-01) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
BC 53 (E211042-02) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
BC 55 (E211042-03) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
BC 14 (E211042-04) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**6.4**	0.10	%	100	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI-1-95 (E211042-05) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**0.020**	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-27 (E211042-06) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**0.099**	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VRU-188 (E211042-07) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VRU 142A (E211042-08) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-59 (E211042-09) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**0.64**	0.010	%	10	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	

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Soil Vapor/Air Analysis by EPA 8015M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VICKERS 1-008 (E211042-10) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VICKERS 1-52 (E211042-11) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
T-VIC 12 (E211042-12) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
T-VIC 70 (E211042-13) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
T-VIC 26 (E211042-14) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VICKERS 1-105 (E211042-15) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**7.4**	0.10	%	100	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-2 (E211042-16) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-268 (E211042-17) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**2.7**	0.10	%	100	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-235 (E211042-18) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	

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3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Soil Vapor/Air Analysis by EPA 8015M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
LAI-1-62 (E211042-20) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**41**	0.10	%	100	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
STK3 (E211042-21) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**9.5**	0.10	%	100	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VRU-LAI 1-LW-203 (E211042-22) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	ND	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
VRU-135 (E211042-23) Vapor Sampled: 15-Nov-22 Received: 16-Nov-22									
Methane	**0.0052**	0.0010	%	1	EK21702	16-Nov-22	16-Nov-22	EPA 8015M	
LAI 1-8 (E211046-01) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	ND	0.0010	%	1	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	
LAI 1-37 (E211046-02) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	**39**	0.10	%	100	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	
LAI 1-25 (E211046-03) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	ND	0.0010	%	1	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	
VRU 266 (E211046-04) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	**0.21**	0.0010	%	1	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	
VRU 186 (E211046-05) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	**6.5**	0.10	%	100	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	

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760-804-9159 Fax

SCS Engineers - Long Beach	Project: SCS111622-11 REV1	
3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Soil Vapor/Air Analysis by EPA 8015M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
LAI 1-69 (E211046-06) Vapor Sampled: 16-Nov-22 Received: 17-Nov-22									
Methane	**0.0014**	0.0010	%	1	EK21804	17-Nov-22	17-Nov-22	EPA 8015M	

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760-804-9159 Fax

SCS Engineers - Long Beach	Project: SCS111622-11 REV1	
3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Soil Vapor/Air Analysis by ASTM D1945 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK21703 - GC										
Blank (EK21703-BLK1)				Prepared & Analyzed: 16-Nov-22						
Carbon dioxide	ND	0.20	%							
Methane	ND	1.0	"							
Blank (EK21703-BLK2)				Prepared & Analyzed: 16-Nov-22						
Carbon dioxide	ND	0.20	%							
Methane	ND	1.0	"							
Batch EK21805 - GC										
Blank (EK21805-BLK1)				Prepared & Analyzed: 17-Nov-22						
Carbon dioxide	ND	0.20	%							

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SCS Engineers - Long Beach	Project: SCS111622-11 REV1	
3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Soil Vapor/Air Analysis by EPA 8015M - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK21702 - GC										
Blank (EK21702-BLK1)				Prepared & Analyzed: 16-Nov-22						
Methane	ND	0.0010	%							
Blank (EK21702-BLK2)				Prepared & Analyzed: 16-Nov-22						
Methane	ND	0.0010	%							
Batch EK21804 - GC										
Blank (EK21804-BLK1)				Prepared & Analyzed: 17-Nov-22						
Methane	ND	0.0010	%							

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SCS Engineers - Long Beach	Project: SCS111622-11 REV1	
3900 Kilroy Airport Way, Suite 100	Project Number: Inglewood Oil Field	Reported:
Long Beach, CA 90806-6816	Project Manager: Jeff Sieg	21-Dec-22 12:05

Notes and Definitions

LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

All soil results are reported in wet weight.

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

ship to H&P Carlsbad, CA

PROBE MATERIALS BENT. & SAND VALVE & FILTER WATER

H&P Mobile Geochemistry, Inc.

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& Field Office - Signal Hill, CA
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VAPOR / AIR Chain of Custody

DATE: 11/15/22
Page 1 of 3

Lab Client and Project Information	
Lab Client/Consultant: SCS Engineers	Project Name / #: Inglewood Oil Field
Lab Client Project Manager: Jeff Sieg	Project Location: 5640 S. Fairfax Ave.
Lab Client Address: 3900 Kilroy Airport Way 100	Report E-Mail(s): J.Sieg@SCSengineers.com
Lab Client City, State, Zip: Long Beach CA 90806	
Phone Number: 562-426-9544	

Sample Receipt (Lab Use Only)	
Date Rec'd: 11/16/22	Control #: 220741.00
H&P Project # SCS111622-11	
Lab Work Order #	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #: 770503742931	
Lab PM Initials: SM	

Reporting Requirements	Turnaround Time	Sampler Information
☒ Standard Report ☐ Level III ☐ Level IV	~~☐ Standard (7 days for preliminary report, 10 days for final report)~~	Sampler(s): Lance Yeoman
☐ Excel EDD ☐ Other EDD:	☒ Rush (specify): 3-day TAT	Signature: [signature]
☐ CA Geotracker Global ID:		Date: 11/15/22

Additional Instructions to Laboratory: sm 11/16/22

*** Preferred VOC units (please choose one):**
☐ µg/L ☐ µg/m³ ☐ ppbv ☒ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☒ CO2 ☒ O2 ☐ N2				
BC 41		11/15/22	8:50	SV	1SL										X	X				
BC 53		↓	9:05	↓	↓										X	X				
BC 55		↓	9:10	↓	↓										X	X				
BC 14		↓	9:22	↓	↓										X	X				
~~LAI-137~~	–	–	–												–	–				
~~LAI-125~~			~~9:40~~												–	–				
LAI-1-95		↓	9:55	↓	↓										X	X				
LAI 1-27		↓	10:02	↓	↓										X	X				
VRU-188		↓	10:15	↓	↓										X	X				
VRU 142A		↓	10:40	↓	↓										X	X				

Approved/Relinquished by:	Company:	Date	Time	Received by:	Company:	Date	Time
[signature]	SCS Engineers	11/15/22	3:00	Jon [signature]	H&P	11/16/22	740

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Appendix 6A1, Rev 1/9/2019, Effective 1/21/2019

H&P Mobile Geochemistry, Inc.

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& Field Office - Signal Hill, CA
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VAPOR / AIR Chain of Custody

DATE: 11/15/22
Page 2 of 3

Lab Client and Project Information

Lab Client/Consultant: SCS Engineers	Project Name / #: Inglewood Oil Field
Lab Client Project Manager: Jeff Sieg	Project Location: 5640 S. Fairfax Ave
Lab Client Address: 3900 Kilroy Airport Way 120	Report E-Mail(s): JSieg@scsengineers.com
Lab Client City, State, Zip: Long Beach CA 90806	
Phone Number:	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/16/22	Control #: 220741.00
H&P Project # SCS111622-11	
Lab Work Order #	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #: 2931	
Lab PM Initials: SM	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:
☐ CA Geotracker Global ID:

Turnaround Time

☐ **Standard** (7 days for preliminary report, 10 days for final report)
☒ **Rush** (specify): 3 day TAT

Sampler Information

Sampler(s): Lance Weyer
Signature: [signature]
Date: 11/15/22

Additional Instructions to Laboratory:

SM 11.16.22

*** Preferred VOC units (please choose one):**
☐ µg/L ☐ µg/m³ ☐ ppbv ☒ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☒ CO2 ☒ O2 ☒ N2
LAI 1-59		11/15/22	11:00	SV	1L										X	X
Vickers 1-008			11:12												X	X
Vickers 1-52			11:22												X	X
T-VIC-12			11:32												X	X
T-VIC 70			11:40												X	X
T-VIC 26			11:51												X	X
Vickers 1-105			12:24												X	X
LAI 1-2			12:45												X	X
LAI 1-2055			12:50												X	X
LAI 1-235			13:10												X	X

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
[signature]	SCS Engineers	11/15/22	3:05	[signature]	H+P	11/16/22	740

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VAPOR / AIR Chain of Custody

DATE: 11/15/22
Page 3 of 3

Lab Client and Project Information

Lab Client/Consultant: SCS Engineers	Project Name / #: Inglewood Oilfield
Lab Client Project Manager: Jeff Sizy	Project Location: 5640 S. Fairfax Ave
Lab Client Address: 3900 Kilroy Airport Way 100	Report E-Mail(s): jsizy@scsengineers.com
Lab Client City, State, Zip: Long Beach, CA 90806	
Phone Number: 562 919 7000 x6	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/16/22	Control #: 220741.00
H&P Project # SCS111622-11	
Lab Work Order #	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #: 2931	
Lab PM Initials: SM	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:
☐ CA Geotracker Global ID:

Turnaround Time

☐ **Standard** (7 days for preliminary report, 10 days for final report)
☒ **Rush** (specify): 3-day TAT

Sampler Information

Sampler(s): [illegible]
Signature: [illegible]
Date: 11/15/22

Additional Instructions to Laboratory: SM 11-16-22

Preferred VOC units (please choose one):
☐ µg/L ☐ µg/m³ ☐ ppbv ☒ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400ml/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☒ CO2 ☒ O2				
LAI 1-100		11/15/22	1:20	SV	1L										X	X				
LAI-1-07		↓	1:37	↓	↓										X	X				
STK 3		↓	1:45	↓	↓										X	X				
VRU-LAI 1-100-223			10:48																	
VRU-135			10:32																	

Approved/Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[signature]	SCS Engineers	11/15/22	300	[signature]	H+P	11/16/21	740

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 11/16/22
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: SCS Engineers	Project Name / #: Inglewood Oil Field
Lab Client Project Manager: Jeff Sieg	Project Location: 5640 S. Fairfax Ave
Lab Client Address: 3900 Kilroy Airport Way 100	Report E-Mail(s): J.Sieg@SCSengineers.com
Lab Client City, State, Zip: Long Beach, CA 90806	
Phone Number: 562-426-9544	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/17/22	Control #: 220741.00
H&P Project #: SCS111622-11	
Lab Work Order #	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #: Fed Ex 7705 1538 2651	
Lab PM Initials: SM (HB Cor)	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:
☐ CA Geotracker Global ID:

Turnaround Time

~~☒ Standard~~ (7 days for preliminary report, 10 days for final report)
☒ Rush (specify): Ted lar HT

Sampler Information

Sampler(s): Lance Weaver
Signature: [signature]
Date: 11/16/22

Additional Instructions to Laboratory:

Preferred VOC units (please choose one):
☐ µg/L ☐ $µg/m^3$ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS) Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar Tube, etc	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☒ CO2 ☒ O2 ☒ N2				
LAI 1-8		11/16/22	7:55	SV	5L Tedlar										X	X				
LAI 1-37		↓	9:30	↓	↓										X	X				
LAI 1-25		↓	8:45	↓	↓										X	X				
VRW 2666		↓	11:35	↓	↓										X	X				
VRW 1412		↓	11:41	↓	↓										X	X				
LAI 1-69		↓	12:20	↓	↓										X	X				

Approved/Relinquished by: [signature]	Company: SCS Engineers	Date: 11/16/22	Time: 1:00	Received by: Fed Ex	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by: [signature]	Company: H&P	Date: 11/17/22	Time: 0835
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

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