District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2101561606
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email msanjari@marathonoil.com	Incident # *(assigned by OCD)*
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

Location of Release Source

Latitude 32.1642533 Longitude -104.09559691
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: RICK DECKARD STATE 4 WA STATE #002H	Site Type: Oil & Gas Facility
Date Release Discovered 1/15/2021	API# *(if applicable) 30-015-45344*

Unit Letter	Section	Township	Range	County
C	04	25S	28E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 50	Volume Recovered (bbls) 50
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A valve was left open on the 3/8" bleeder line from the water transfer pump that resulted in the release of 44.7 bbl. of fluid inside of the lined WTP containment. As it continued to release, the WTP containment it overflowed, allowing approx. 5.3 bbl. of produced water to be released onto the engineered pad. The source was isolated and all standing fluid was recovered from both the pad and inside of the containment.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2101561606
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? C141a submitted 1/15/2021	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 1/18/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2101561606
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>105 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2101561606
District RP	
Facility ID	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 2/23/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: Cristina Eads Date: 02/24/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2101561606
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 2/23/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: Cristina Eads Date: 02/24/2021

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date: 06/28/2021

Printed Name: Cristina Eads Title: Environmental Specialist

Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220
(575) 689-8801

February 12, 2021

#5E29918-BG2

NMOCD District 2
811 S. First St.
Artesia, New Mexico 88210

SUBJECT: Remediation Closure Report for the Rick Deckard State 4 WA State #002H Release (NAPP2101561606), Eddy, County, New Mexico

To Whom it May Concern:

On behalf of Marathon Oil Permian LLC (Marathon), Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes the remediation of a release of liquids related to oil and gas production activities at the Rick Deckard State 4 WA State #002H site. The site is in Unit C, Section 04, Township 25S, Range 28E, Eddy County, New Mexico, on State land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	Rick Deckard State 4 WA State #002H	Company	Marathon Oil Permian LLC
API Number	30-015-45344	Location	32.1642533 -104.09559691
Tracking Number	NAPP2101561606		
Estimated Date of Release	1/15/2021	Date Reported to NMOCD	1/15/2021
Land Owner	State	Reported To	NMOCD District 2
Source of Release	Valve on the 3/8” bleeder line		
Released Volume	50 bbls	Released Material	Produced Water
Recovered Volume	50 bbls	Net Release	0 bbls
NMOCD Closure Criteria	>100 feet to groundwater		
SMA Response Dates	January 28, 2021		

1.0 Background

On January 15, 2021, a release was discovered at the Rick Deckard State 4 WA State #002H site due to an open valve on the 3/8" bleeder line that resulted in the release of . bbl. of fluid inside of the lined containment. As it continued to release the containment o erflo ed allo ing approx. . bbl. of produced ater to be released onto the engineered pad. Initial response activities were conducted by operator and/or SMA, and included source elimination and containment activities, which recovered approximately 50 bbl. of fluid, which were disposed of at an NMOCD approved facility. Figure 1 illustrates the vicinity and site location; Figure 2 illustrates the release location. The C-141 form is included in Appendix A and liner integrity inspection documentation is included in Appendix E.

2.0 Site Information and Closure Criteria

The Rick Deckard State 4 WA State #002H is an active production facility located approximately 4.3 miles to the southwest of Malaga, New Mexico on State land at an elevation of approximately 3,303 feet above mean sea level (amsl).

Depth to Groundwater
Based upon New Mexico Office of the State Engineer (NMOSE) well records (Appendix B), depth to groundwater in the area is estimated to be greater than 105 feet below grade surface (bgs).

Wellhead Protection Area
There is one known water source within ½-mile of the location, according to the (NMOSE) online water well database.

Distance to Nearest Significant Watercourse
The nearest significant watercourse is Horseshoe Lake, located approximately 3,891 feet to the northwest.

Table 2 demonstrates the Closure Criteria applicable to this location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of greater than 100 feet bgs.

3.0 Release Characterization and Remediation Activities

On January 28, 20 1, SMA personnel performed site delineation activities at the Rick Deckard State 4 WA State #002H site. SMA collected soil samples around the release site on the engineered pad and throughout the visibly stained area. The area of visual impact was located entirely within the boundary of the developed production facility.

Soil samples were field-screened for chloride using an electrical conductivity (EC) meter and/or for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp.

A total of eight (8) sample locations were investigated using a hand-auger, to depths up to four (4) feet bgs. A total of twenty (20) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. A background sample (BG1) was also collected.

Figure 3 shows the extent of the release and sample locations. Laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D.

4.0 Site Recommendations

As demonstrated in Table 3, all samples collected during initial delineation meet the Closure Criteria.

SMA recommends no further action and requests closure of Incident Number NAPP2101561606.

5.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either SMA Project Manager at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:

Ashely Maxwell
Project Scientist

Shawna Chubbuck
Senior Scientist

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed Click or tap to enter a date.

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Surface Water Radius Map
Figure 3: Site and Sample Location Map

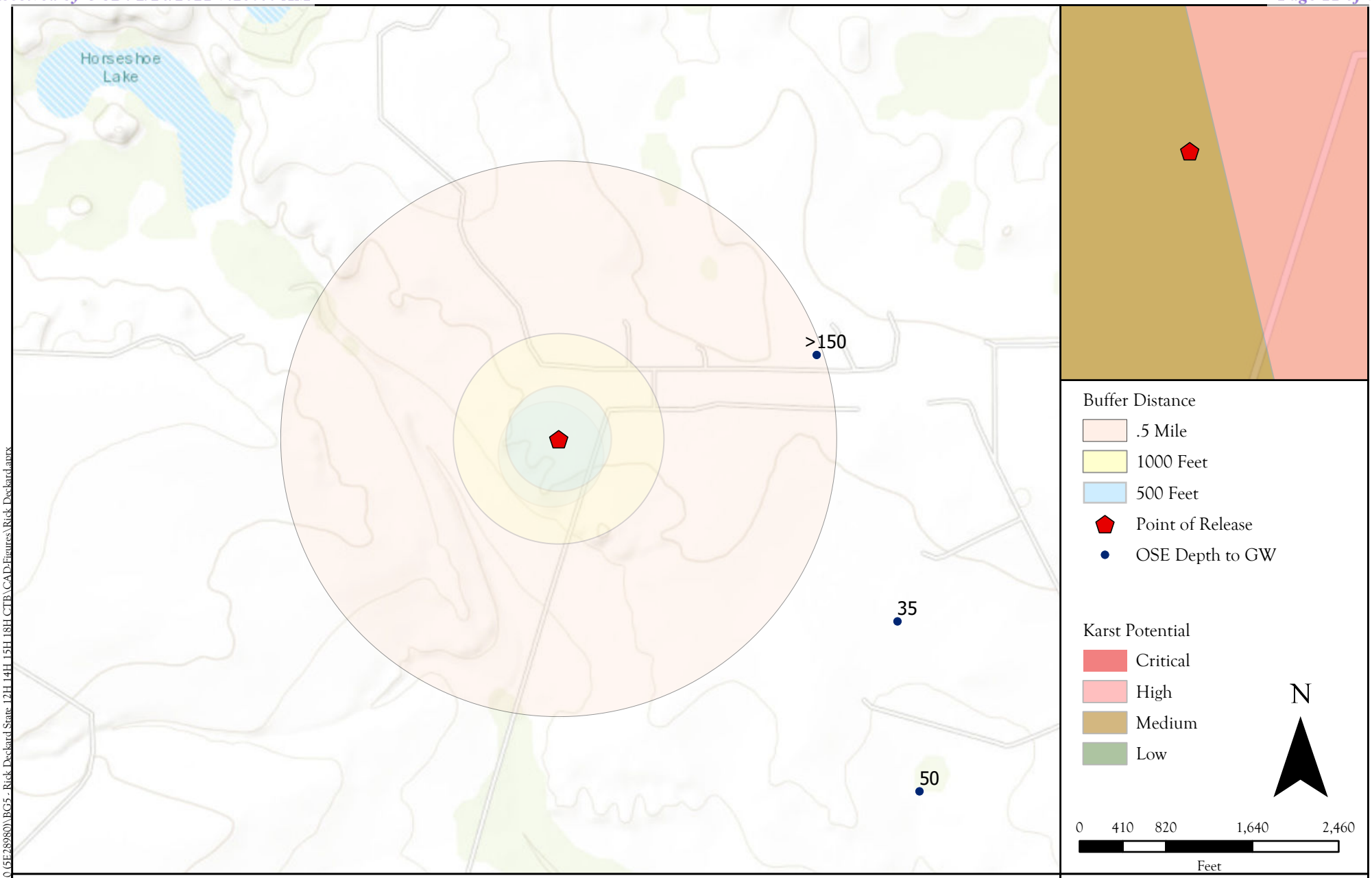
Tables:

Table 2: NMOCD Closure Criteria Justification
Table 3: Summary of Sample Results

Appendices:

Appendix A: Form C141
Appendix B: NMOSE Wells Report
Appendix C: Field Notes
Appendix D: Laboratory Analytical Reports
Appendix E: Liner Integrity Inspection Documenation

FIGURES



Site Map

Rick Deckard State 4WA State 2H- Marathon Oil

UL: C S: 04 T: 25S R: 28E, Eddy County, New Mexico

Figure 1

Revisions

By: Date: Descr:

By: Date: Descr:

Date Saved: 2/19/2021

Drawn Zach Taraschi

Date 2/23/2021

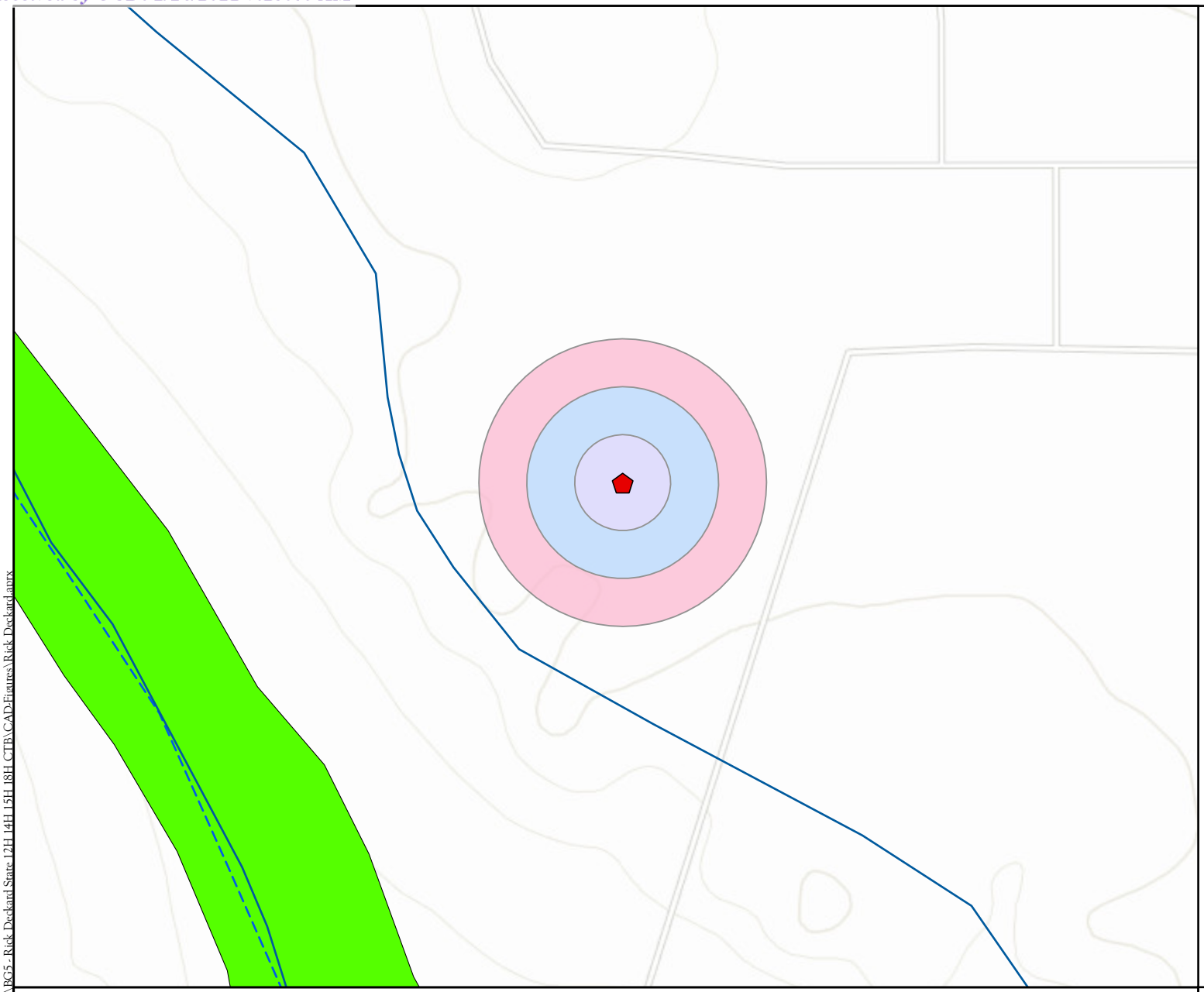
Checked

Approved

SMA

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains

\\cbo\Projects\5-Marathon MSA 2020 (5E28980)\BG5 - Rick Deckard State 12H 14H 15H 18H CTB\CAD\Figures\Rick Deckard.mxd



Point of Release

Buffer Distance

300 Feet

200 Feet

100 Feet

Springs & Seeps

Streams & Canals

Rivers

Flowlines SENM

NM Wetlands

Lakes & Playas

FEMA Flood Zones 2011

N

0 100 200 400 600

Feet

Surface Water Protection Map
Rick Deckard State 4WA State 2H- Marathon Oil
UL: C S: 04 T: 25S R: 28E, Eddy County, New Mexico

Figure 2

R:\5-Marathon MSA 2020 (5E28980)\BG5 - Rick Deckard State 12H 14H 15H 18H CTB\CAD\Figures\Rick Deckard.mxd
Date Saved: 6/17/2020

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Jake Madison
Date 2/18/2021
Checked
Approved

SMA

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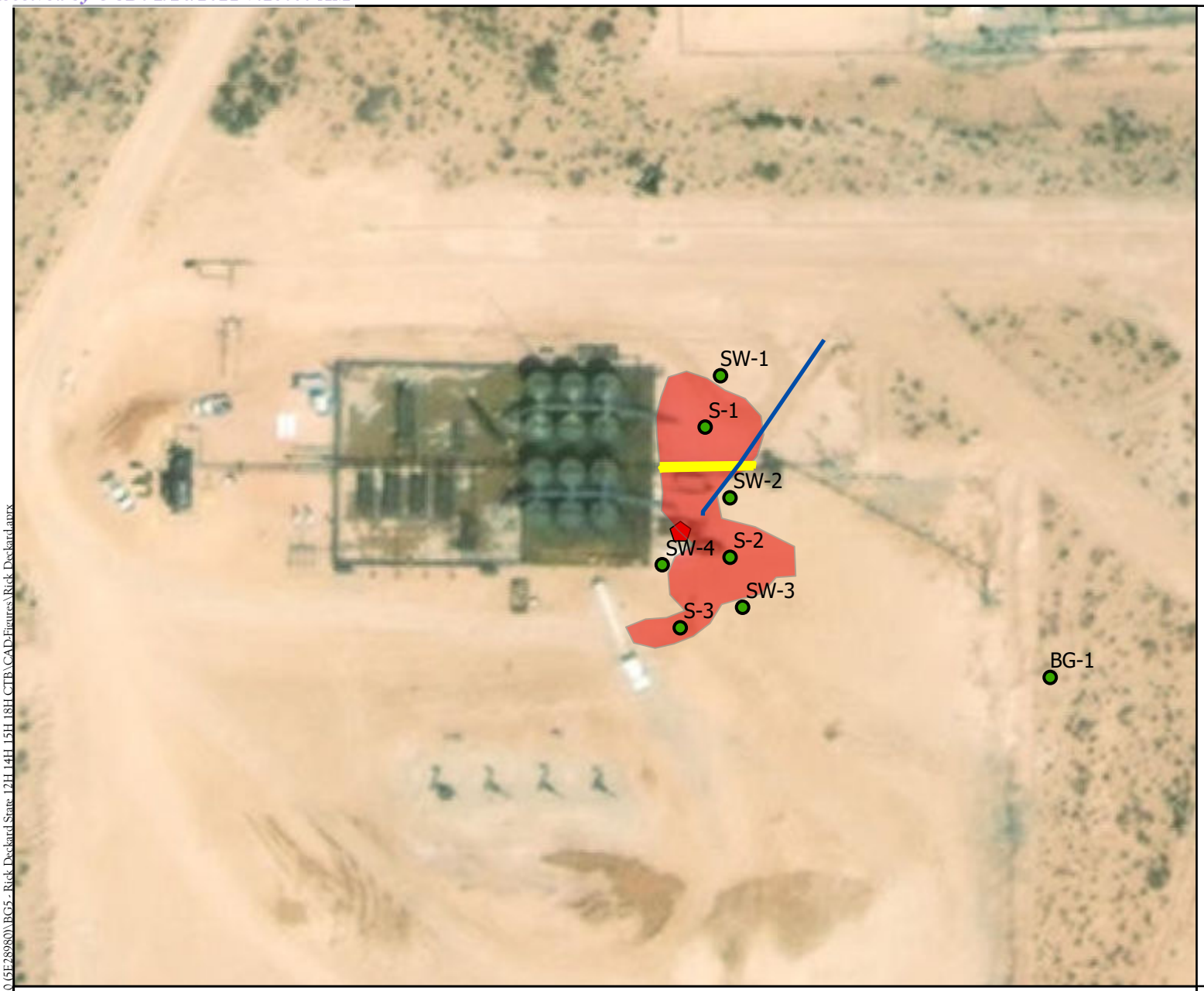

Legend

- Point of Release
- Release Area
- Pipelines
- Water Lines
- Sample Locations

N

0 25 50 100 150

Feet

Site and Sample Location Map
Rick Deckard State 4WA State 2H- Marathon Oil
UL: C S: 04 T: 25S R: 28E, Eddy County, New Mexico

Figure 3

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Jake Madison
Date 2/23/2021
Checked
Approved

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-7040
Serving the Southwest & Rocky Mountains

Date Saved: 2/23/2021

\\cbo\Projects\5-Marathon MSA 2020 (5E28980)\BG5 - Rick Deckard State 12H 14H 15H 18H CTB\CAD\Figures\Rick Deckard.mxd

TABLES

Table 2:
NMOCD Closure Criteria

Marathon Oil Permian LLC
Rick Deckard State 4WA State #002H

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	>100	NMOSE Well Data
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)		USGS 7.5 Quadrangle Map
Hortizontal Distance to Nearest Significant Watercourse (ft)	3,891	Horshoe Lake located to the northwest

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		**Closure Criteria (units in mg/kg)**				
		Chloride *numerical limit or background, whichever is greater	**TPH**	**GRO + DRO**	**BTEX**	**Benzene**
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	X	20000	2500	1000	50	10
Surface Water	**yes or no**	**if yes, then**				
<300' from continuously flowing watercourse or other significant watercourse?	**No**	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	**No**					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	**No**					
<1000' from fresh water well or spring?	**No**					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	**No**					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	**No**					
<100' from wetland?	**No**					
within area overlying a subsurface mine	**No**					
within an unstable area?	**No (med.)**					
within a 100-year floodplain?	**No**					

Table 3:
Sample Results

Marathon Oil Permian LLC
Rick Deckard State 4 WA State #002H

Sample ID	Sample Date	Depth of Sample (feet bgs)	Action Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Closure Criteria				50	10	1,000			2,500	20,000
BG1	1/28/2021	Surface	In Situ	<0.221	<0.025	<4.9	<9.7	<49	<63.6	310
	1/28/2021	1	In Situ	<0.220	<0.024	<4.9	<9.6	<48	<62.5	170
	1/28/2021	2	In Situ	<0.221	<0.025	<4.9	<9.8	<49	<63.7	<60
S1	1/28/2021	Surface	In Situ	<0.222	<0.025	<4.9	<9.0	<45	<58.9	9,900
	1/28/2021	1	In Situ	<0.225	<0.025	<5.0	<9.9	<50	<64.9	220
	1/28/2021	2	In Situ	<0.225	<0.025	<5.0	<9.9	<49	<63.9	290
	1/28/2021	3	In Situ	<0.224	<0.025	<5.0	<9.7	<49	<63.7	280
	1/28/2021	4	In Situ	<0.220	<0.024	<4.9	<9.5	<48	<62.4	480
S2	1/28/2021	Surface	In Situ	<0.222	<0.025	<4.9	<9.9	<50	<64.8	9,200
	1/28/2021	1	In Situ	<0.224	<0.025	<5.0	<9.5	<48	<62.5	280
	1/28/2021	2	In Situ	<0.225	<0.025	<5.0	<9.5	<47	<61.5	320
	1/28/2021	3	In Situ	<0.219	<0.024	<4.9	<9.8	<49	<63.7	340
S3	1/28/2021	Surface	In Situ	<0.221	<0.025	<4.9	14	<43	14	20,000
	1/28/2021	1	In Situ	<0.224	<0.025	<5.0	<9.8	<49	<63.8	210
	1/28/2021	2	In Situ	<0.221	<0.025	<4.9	<9.1	<45	<59.0	360
	1/28/2021	3	In Situ	<0.225	<0.025	<5.0	<9.4	<47	<61.4	400
SW1	1/28/2021	0-0.5	In Situ	<0.222	<0.025	<4.9	<8.5	<42	<55.4	100
SW2	1/28/2021	0-0.5	In Situ	<0.222	<0.025	<4.9	<9.7	<48	<62.6	260
SW3	1/28/2021	0-0.5	In Situ	<0.221	<0.025	<4.9	<9.1	<46	<60.0	400
SW4	1/28/2021	0-0.5	In Situ	<0.216	<0.024	<4.8	<9.4	<47	<61.2	72

"-" = Not Analyzed

BG: Background sample

APPENDIX A
FORM C141

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
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Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

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Contact email msanjari@marathonoil.com	Incident # *(assigned by OCD)*
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(NAD 83 in decimal degrees to 5 decimal places)

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Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

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☒ Produced Water	Volume Released (bbls) 50	Volume Recovered (bbls) 50
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

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A valve was left open on the 3/8" bleeder line from the water transfer pump that resulted in the release of 44.7 bbl. of fluid inside of the lined WTP containment. As it continued to release, the WTP containment it overflowed, allowing approx. 5.3 bbl. of produced water to be released onto the engineered pad. The source was isolated and all standing fluid was recovered from both the pad and inside of the containment.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2101561606
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume
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☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

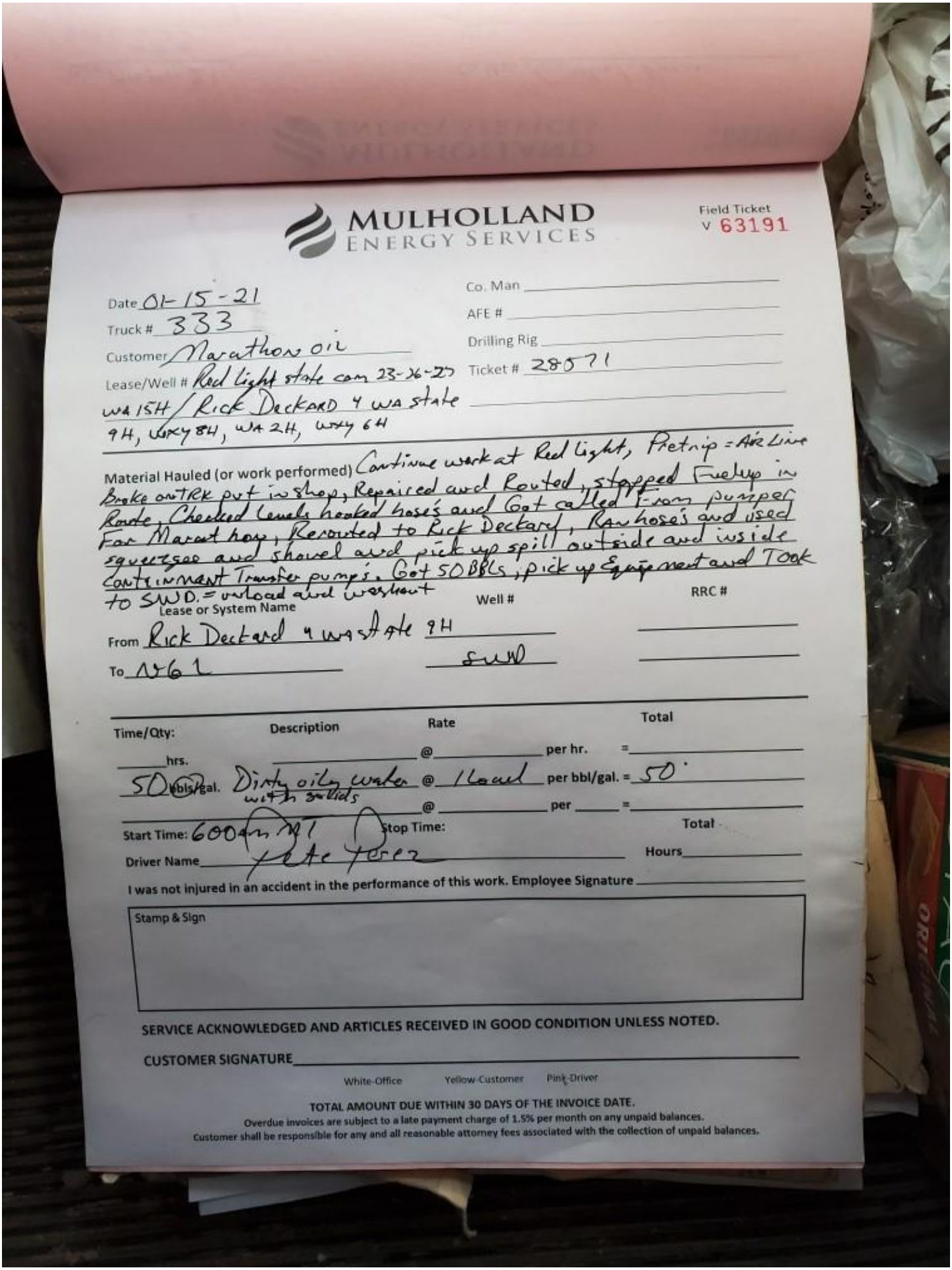
Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 1/18/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

OCD Only

Received by: Ramona Marcus Date: 1/22/2021



MULHOLLAND ENERGY SERVICES

Field Ticket V 63191

Date 01-15-21
Truck # 333
Customer Marathon Oil
Lease/Well # Red Light state com 23-26-27 WA 15H / Rick Deckard 4 WA state 9H, WXY 8H, WA 2H, WXY 6H

Co. Man
AFE #
Drilling Rig
Ticket # 28571

Material Hauled (or work performed) Continue work at Red Light, Pretrip = Air Line Broke on TRK put in shop, Repaired and Routed, stopped Fuelup in Route, Checked Levels hooked hoses and Got called From pumper For Marathon, Rerouted to Rick Deckard, Ran hoses and used squeegee and shovel and pick up spill outside and inside containment Transfer pumps. Got 50 BBLs, pick up Equipment and Took to SWD. = unload and washout

Lease or System Name | Well # | RRC #

From Rick Deckard 4 WA State 9H
To NM61 SWD

Time/Qty:	Description	Rate	Total
hrs.		@ per hr.	=
50 bbls/gal.	Dirty oily water with no solids	@ 1 load per bbl/gal.	= 50
		@ per	=

Start Time: 600am MT Stop Time: Total

Driver Name Pete Perez Hours

I was not injured in an accident in the performance of this work. Employee Signature

Stamp & Sign

SERVICE ACKNOWLEDGED AND ARTICLES RECEIVED IN GOOD CONDITION UNLESS NOTED.

CUSTOMER SIGNATURE

White-Office Yellow-Customer Pink-Driver

TOTAL AMOUNT DUE WITHIN 30 DAYS OF THE INVOICE DATE.
Overdue invoices are subject to a late payment charge of 1.5% per month on any unpaid balances.
Customer shall be responsible for any and all reasonable attorney fees associated with the collection of unpaid balances.

NAPP2101561606

Spill Calculation Tool

Marathon Oil

Standing Liquid Inputs:

	Length (ft.)	Width (ft.)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1					0.00	0.00	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
				Liquid Volume:	**0.00**	**0.00**	**0.00**

Saturated Soil Inputs: Soil Type: Gravel Loam

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1		7550	0.333333333	0%	5.23	5.23	0.00
Rectangle Area #2				0%	0.00	0.00	0.00
Rectangle Area #3				0%	0.00	0.00	0.00
Rectangle Area #4				0%	0.00	0.00	0.00
Rectangle Area #5				0%	0.00	0.00	0.00
Rectangle Area #6				0%	0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
				Saturated Volume	**5.23**	**5.23**	**0.00**

Volume Recovered *and not included in Standing Liquid Inputs* :

% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	**5.23**	**5.23**	**0.00**

APPENDIX B
NMOSE WELLS REPORT

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
District 2 Office, Roswell, NM

John R. D'Antonio Jr. , P.E.
State Engineer

1900 West Second Street
Roswell, New Mexico 88201
(575) 622-6521
FAX: (575) 623-8559

October 28, 2020

Solaris Water Midstream
c/o Michael Incerto
3305 Boyd Drive W. 2nd Street
Carlsbad, NM 88220

RE: *Well Plugging Plan of Operations for C-4487-POD1*

Greetings:

Enclosed is your copy of Well Plugging Plan of Operations for the above referenced project, which has been approved subject to the attached Specific Conditions of Approval. The following conditions of approval have been developed to ensure compliance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 13, 2017, by the State Engineer.

Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Sincerely,

Christopher Angel, PG
Water Resources Professional II
Water Resource Allocation Program

encl

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C-4487-POD1

Name of well owner: ~~Solaris Water Midstream~~ United States Bureau of Land Management

Mailing address: 3305 Boyd Drive Carlsbad Field Office

City: Carlsbad State: New Mexico Zip code: 88220

Phone number: 512-970-6666 E-mail: michael.incerto@solarismidstream.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Jason Maley, Vision Resources

New Mexico Well Driller License No.: WD1690 Expiration Date: 5/31/2021

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 10 min, .81 sec
Longitude: -104 deg, 5 min, 14.38 sec, WGS84
☑ Check if seconds are decimal format.

2) Reason(s) for plugging well: SWSESE Section 33, T.24S R.28E
Drilled as test boring to evaluate for the absence or presence of groundwater less than 105-ft.

3) Was well used for any type of monitoring program? no If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? no, dry If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: no water feet below land surface / feet above land surface (circle one)

6) Depth of the well: boring 105-ft feet

24.28.33.443

7) Inside diameter of innermost casing: no casing inches.

8) Casing material: no casing

9) The well was constructed with:

☐ an open-hole production interval, state the open interval: no water, test boring only

☐ a well screen or perforated pipe, state the screened interval(s): no water, no well constructed.

10) What annular interval surrounding the artesian casing of this well is cement-grouted? no casing, no gravel pack

11) Was the well built with surface casing? no well If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? no seal If yes, please describe:

Open 6.25-inch boring.

12) Has all pumping equipment and associated piping been removed from the well? none installed If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

Well to be plugged with bentonite chips. Hydrated at 5-gallons per sack. Bentonite and water added in lifts. Bentonite below 20-ft to total depth will be tremied in.

2) Will well head be cut-off below land surface after plugging? no well head

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 21.3-cubic feet

4) Type of Cement proposed: bentonite chips

5) Proposed cement grout mix: — gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: — batch-mixed and delivered to the site

— mixed on site

7) Grout additives requested, and percent by dry weight relative to cement:

grout not planned.

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Boring drilled as a test boring to 105-ft. Hole is stable and open to 105-ft. Will add bentonite chips and water in lifts to abandon.

VIII. SIGNATURE:

I, Michael Incerto, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant — Date: 10/8/20

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

✓ Approved subject to the attached conditions.
____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 28 day of October, 2020

John R D'Antonio, Jr, PE
By:
Christopher Angel, PG
Water Resources Professional II

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	1-ft, fill to one-ft below ground surface. Top 1-ft with soil backfill.		
Bottom of proposed sealant of grout placement (ft bgl)	bottom 105-ft 0 to 20': pour from surface 20 to 105': tremie chips		
Theoretical volume of sealant required per interval (gallons)	21.31-cubic feet = 156.4 gallons		
Proposed abandonment sealant (manufacturer and trade name)	Wyoming Bentonite		

Specific Conditions of C-4487-POD1

1. Bentonite chips shall be hydrated with fresh water above the water column at a rate of 5 gallons per 50 pound sack. Water shall be added after each 50 pound sack is placed.
2. Bentonite chips shall be tremied from the bottom up to 20 feet below ground surface. From 20 feet below ground surface to ground surface the bentonite can be poured.
3. A completed Plugging Record form shall be submitted no later than 30 days after completion of the plugging.
4. Before any attempts are made to plug this well, the O.S.E. District II Office shall be notified 48 hours in advance of the anticipated schedule for plugging, so that an O.S.E. representative has the opportunity to witness the procedures, if deemed necessary.
5. Any deviation from this plan must obtain an approved variance from this office prior to implementation.
6. Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Witness my hand and seal this 28th day of October A.D., 2020

John R. D'Antonio Jr., P.E., State Engineer

By: _____
Christopher Angel, PG
Groundwater Resources Professional II

APPENDIX C
FIELD NOTES

Field Screening

Location Name: Rick DeKard 2H

Date: 1-28-21

Sample Name:	Soil Type:	Depth (BGS)	Collection Time:	EC (ppm)	Temp (°C)	PID Reading	PF
S-1		Surf		6.49	10.2	4.2	
		-1'		0.28	9.7	3.4	
		-2'		0.35	10.1	3.5	
		-3'		0.53	9.4	3.1	
		-4'		0.37	13.3	2.5	
S-2		Surf		3.66	9.4	2.7	
		-1'		0.82	9.5	2.9	
		-2'		0.37	9.6	3.8	
		-3'		0.35	9.6	4.0	
S-3		Surf		11.04	10.2	9.6	
		-1'		0.27	10.5	3.1	
		-2'		0.63	11.8	2.0	
		-3'		0.25	11.0	1.7	
BG-1		Surf		1.16	17.1	2.0	
		-1'		0.07	10.0	1.6	
		-2'		0.06	9.6	1.5	
		-3'		0.08	9.6	1.3	
		-4'		0.07	9.7	1.5	
SW-1		0-6"		0.50	17.4	1.6	
SW-2		0-6"		0.29	16.9	1.5	
SW-3		0-6"		1.07	17.1	1.5	
SW-4		0-6"		0.52	15.9	1.5	

APPENDIX D

LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 05, 2021

Ashley Maxwell
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX:

RE: Rick Deckard 2H OrderNo.: 2101B05

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 17 sample(s) on 1/30/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-1 (Surf)
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-001 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	9900	600		mg/Kg	200	2/4/2021 10:58:54 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/1/2021 12:53:11 PM	57815
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/1/2021 12:53:11 PM	57815
Surr: DNOP	91.2	30.4-154		%Rec	1	2/1/2021 12:53:11 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/1/2021 7:31:50 PM	57813
Surr: BFB	95.0	75.3-105		%Rec	1	2/1/2021 7:31:50 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 7:31:50 PM	57813
Toluene	ND	0.049		mg/Kg	1	2/1/2021 7:31:50 PM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/1/2021 7:31:50 PM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/1/2021 7:31:50 PM	57813
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/1/2021 7:31:50 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-1 (-1')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-002 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	220	60		mg/Kg	20	2/2/2021 3:49:27 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/1/2021 1:16:55 PM	57815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/1/2021 1:16:55 PM	57815
Surr: DNOP	92.1	30.4-154		%Rec	1	2/1/2021 1:16:55 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2021 8:42:32 PM	57813
Surr: BFB	95.4	75.3-105		%Rec	1	2/1/2021 8:42:32 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 8:42:32 PM	57813
Toluene	ND	0.050		mg/Kg	1	2/1/2021 8:42:32 PM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2021 8:42:32 PM	57813
Xylenes, Total	ND	0.10		mg/Kg	1	2/1/2021 8:42:32 PM	57813
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/1/2021 8:42:32 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-1 (-2')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-003 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	290	60		mg/Kg	20	2/2/2021 4:01:52 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/1/2021 1:40:38 PM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 1:40:38 PM	57815
Surr: DNOP	93.0	30.4-154		%Rec	1	2/1/2021 1:40:38 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2021 9:52:47 PM	57813
Surr: BFB	95.0	75.3-105		%Rec	1	2/1/2021 9:52:47 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 9:52:47 PM	57813
Toluene	ND	0.050		mg/Kg	1	2/1/2021 9:52:47 PM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2021 9:52:47 PM	57813
Xylenes, Total	ND	0.10		mg/Kg	1	2/1/2021 9:52:47 PM	57813
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/1/2021 9:52:47 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-1 (-3')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-004 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	280	61		mg/Kg	20	2/2/2021 4:14:17 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/1/2021 2:04:19 PM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 2:04:19 PM	57815
Surr: DNOP	98.3	30.4-154		%Rec	1	2/1/2021 2:04:19 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2021 10:16:22 PM	57813
Surr: BFB	95.0	75.3-105		%Rec	1	2/1/2021 10:16:22 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 10:16:22 PM	57813
Toluene	ND	0.050		mg/Kg	1	2/1/2021 10:16:22 PM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2021 10:16:22 PM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/1/2021 10:16:22 PM	57813
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	2/1/2021 10:16:22 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-1 (-4')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-005 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	480	60		mg/Kg	20	2/2/2021 4:26:41 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/1/2021 2:28:00 PM	57815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2021 2:28:00 PM	57815
Surr: DNOP	93.8	30.4-154		%Rec	1	2/1/2021 2:28:00 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/1/2021 10:39:52 PM	57813
Surr: BFB	95.6	75.3-105		%Rec	1	2/1/2021 10:39:52 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/1/2021 10:39:52 PM	57813
Toluene	ND	0.049		mg/Kg	1	2/1/2021 10:39:52 PM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/1/2021 10:39:52 PM	57813
Xylenes, Total	ND	0.098		mg/Kg	1	2/1/2021 10:39:52 PM	57813
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/1/2021 10:39:52 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-2 (Surf)
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-006 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	9200	600		mg/Kg	200	2/4/2021 11:11:19 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/1/2021 2:51:40 PM	57815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/1/2021 2:51:40 PM	57815
Surr: DNOP	94.0	30.4-154		%Rec	1	2/1/2021 2:51:40 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/1/2021 11:03:20 PM	57813
Surr: BFB	94.4	75.3-105		%Rec	1	2/1/2021 11:03:20 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 11:03:20 PM	57813
Toluene	ND	0.049		mg/Kg	1	2/1/2021 11:03:20 PM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/1/2021 11:03:20 PM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/1/2021 11:03:20 PM	57813
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	2/1/2021 11:03:20 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-2 (-1')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-007 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	280	60		mg/Kg	20	2/3/2021 3:33:49 PM	57884
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/1/2021 3:15:22 PM	57815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2021 3:15:22 PM	57815
Surr: DNOP	92.0	30.4-154		%Rec	1	2/1/2021 3:15:22 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2021 11:26:49 PM	57813
Surr: BFB	95.2	75.3-105		%Rec	1	2/1/2021 11:26:49 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 11:26:49 PM	57813
Toluene	ND	0.050		mg/Kg	1	2/1/2021 11:26:49 PM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2021 11:26:49 PM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/1/2021 11:26:49 PM	57813
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	2/1/2021 11:26:49 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-2 (-2')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-008 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	320	60		mg/Kg	20	2/3/2021 8:19:13 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/1/2021 3:39:04 PM	57815
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/1/2021 3:39:04 PM	57815
Surr: DNOP	94.6	30.4-154		%Rec	1	2/1/2021 3:39:04 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/1/2021 11:50:18 PM	57813
Surr: BFB	94.2	75.3-105		%Rec	1	2/1/2021 11:50:18 PM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/1/2021 11:50:18 PM	57813
Toluene	ND	0.050		mg/Kg	1	2/1/2021 11:50:18 PM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/1/2021 11:50:18 PM	57813
Xylenes, Total	ND	0.10		mg/Kg	1	2/1/2021 11:50:18 PM	57813
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	2/1/2021 11:50:18 PM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-2 (-3')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-009 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	340	60		mg/Kg	20	2/3/2021 8:31:37 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/1/2021 4:02:46 PM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 4:02:46 PM	57815
Surr: DNOP	99.2	30.4-154		%Rec	1	2/1/2021 4:02:46 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 12:13:45 AM	57813
Surr: BFB	95.2	75.3-105		%Rec	1	2/2/2021 12:13:45 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/2/2021 12:13:45 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 12:13:45 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 12:13:45 AM	57813
Xylenes, Total	ND	0.097		mg/Kg	1	2/2/2021 12:13:45 AM	57813
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/2/2021 12:13:45 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-3 (Surf)
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-010 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	20000	1500		mg/Kg	500	2/4/2021 11:23:43 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	14	8.6		mg/Kg	1	2/1/2021 4:26:28 PM	57815
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/1/2021 4:26:28 PM	57815
Surr: DNOP	96.4	30.4-154		%Rec	1	2/1/2021 4:26:28 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 12:37:15 AM	57813
Surr: BFB	103	75.3-105		%Rec	1	2/2/2021 12:37:15 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 12:37:15 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 12:37:15 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 12:37:15 AM	57813
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 12:37:15 AM	57813
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	2/2/2021 12:37:15 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-3 (-1')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-011 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	210	60		mg/Kg	20	2/3/2021 8:56:27 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/1/2021 4:50:08 PM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 4:50:08 PM	57815
Surr: DNOP	94.2	30.4-154		%Rec	1	2/1/2021 4:50:08 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/2/2021 1:47:28 AM	57813
Surr: BFB	93.5	75.3-105		%Rec	1	2/2/2021 1:47:28 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 1:47:28 AM	57813
Toluene	ND	0.050		mg/Kg	1	2/2/2021 1:47:28 AM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/2/2021 1:47:28 AM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/2/2021 1:47:28 AM	57813
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	2/2/2021 1:47:28 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-3 (-2')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-012 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	360	60		mg/Kg	20	2/3/2021 9:08:51 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/1/2021 5:13:44 PM	57815
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/1/2021 5:13:44 PM	57815
Surr: DNOP	94.7	30.4-154		%Rec	1	2/1/2021 5:13:44 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 2:10:50 AM	57813
Surr: BFB	93.2	75.3-105		%Rec	1	2/2/2021 2:10:50 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 2:10:50 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 2:10:50 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 2:10:50 AM	57813
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 2:10:50 AM	57813
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	2/2/2021 2:10:50 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: S-3 (-3')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-013 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	400	60		mg/Kg	20	2/3/2021 9:21:16 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/1/2021 5:37:25 PM	57815
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/1/2021 5:37:25 PM	57815
Surr: DNOP	95.9	30.4-154		%Rec	1	2/1/2021 5:37:25 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/2/2021 2:34:15 AM	57813
Surr: BFB	93.7	75.3-105		%Rec	1	2/2/2021 2:34:15 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 2:34:15 AM	57813
Toluene	ND	0.050		mg/Kg	1	2/2/2021 2:34:15 AM	57813
Ethylbenzene	ND	0.050		mg/Kg	1	2/2/2021 2:34:15 AM	57813
Xylenes, Total	ND	0.10		mg/Kg	1	2/2/2021 2:34:15 AM	57813
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	2/2/2021 2:34:15 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-1 (0-6")
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-014 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	100	60		mg/Kg	20	2/3/2021 9:33:41 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	2/1/2021 6:00:58 PM	57815
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	2/1/2021 6:00:58 PM	57815
Surr: DNOP	93.0	30.4-154		%Rec	1	2/1/2021 6:00:58 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 2:57:33 AM	57813
Surr: BFB	94.5	75.3-105		%Rec	1	2/2/2021 2:57:33 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 2:57:33 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 2:57:33 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 2:57:33 AM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/2/2021 2:57:33 AM	57813
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/2/2021 2:57:33 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-2 (0-6")
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-015 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	260	60		mg/Kg	20	2/3/2021 10:10:55 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/1/2021 6:24:29 PM	57815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2021 6:24:29 PM	57815
Surr: DNOP	91.4	30.4-154		%Rec	1	2/1/2021 6:24:29 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 3:20:50 AM	57813
Surr: BFB	94.5	75.3-105		%Rec	1	2/2/2021 3:20:50 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 3:20:50 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 3:20:50 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 3:20:50 AM	57813
Xylenes, Total	ND	0.099		mg/Kg	1	2/2/2021 3:20:50 AM	57813
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	2/2/2021 3:20:50 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-3 (0-6")
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-016 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	400	61		mg/Kg	20	2/3/2021 10:23:19 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/1/2021 12:20:25 PM	57819
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/1/2021 12:20:25 PM	57819
Surr: DNOP	102	30.4-154		%Rec	1	2/1/2021 12:20:25 PM	57819
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 3:44:07 AM	57813
Surr: BFB	94.5	75.3-105		%Rec	1	2/2/2021 3:44:07 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 3:44:07 AM	57813
Toluene	ND	0.049		mg/Kg	1	2/2/2021 3:44:07 AM	57813
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 3:44:07 AM	57813
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 3:44:07 AM	57813
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/2/2021 3:44:07 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B05**
Date Reported: **2/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-4 (0-6")
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B05-017 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	72	60		mg/Kg	20	2/3/2021 10:35:43 PM	57892
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/1/2021 12:44:23 PM	57819
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/1/2021 12:44:23 PM	57819
Surr: DNOP	99.9	30.4-154		%Rec	1	2/1/2021 12:44:23 PM	57819
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/2/2021 4:07:26 AM	57813
Surr: BFB	91.8	75.3-105		%Rec	1	2/2/2021 4:07:26 AM	57813
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/2/2021 4:07:26 AM	57813
Toluene	ND	0.048		mg/Kg	1	2/2/2021 4:07:26 AM	57813
Ethylbenzene	ND	0.048		mg/Kg	1	2/2/2021 4:07:26 AM	57813
Xylenes, Total	ND	0.096		mg/Kg	1	2/2/2021 4:07:26 AM	57813
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	1	2/2/2021 4:07:26 AM	57813

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B05**

05-Feb-21

Client: Souder, Miller & Associates

Project: Rick Deckard 2H

Sample ID: **MB-57845** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **57845** RunNo: **75018**
Prep Date: **2/2/2021** Analysis Date: **2/2/2021** SeqNo: **2648176** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-57845** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **57845** RunNo: **75018**
Prep Date: **2/2/2021** Analysis Date: **2/2/2021** SeqNo: **2648177** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: **MB-57884** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **57884** RunNo: **75031**
Prep Date: **2/3/2021** Analysis Date: **2/3/2021** SeqNo: **2649224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-57884** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **57884** RunNo: **75031**
Prep Date: **2/3/2021** Analysis Date: **2/3/2021** SeqNo: **2649225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: **MB-57892** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **57892** RunNo: **75031**
Prep Date: **2/3/2021** Analysis Date: **2/3/2021** SeqNo: **2649254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-57892** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **57892** RunNo: **75031**
Prep Date: **2/3/2021** Analysis Date: **2/3/2021** SeqNo: **2649255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B05**

05-Feb-21

Client: Souder, Miller & Associates

Project: Rick Deckard 2H

Sample ID: **MB-57819**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **57819**	RunNo: **74965**
Prep Date: **2/1/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646643** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	30.4	154			

Sample ID: **LCS-57819**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **57819**	RunNo: **74965**
Prep Date: **2/1/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646800** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	68.9	141			
Surr: DNOP	4.8		5.000		95.3	30.4	154			

Sample ID: **MB-57815**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646888** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.1	30.4	154			

Sample ID: **LCS-57815**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646889** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	68.9	141			
Surr: DNOP	4.6		5.000		92.5	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B05**

05-Feb-21

Client: Souder, Miller & Associates

Project: Rick Deckard 2H

Sample ID: **mb-57813** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **57813** RunNo: **74963**

Prep Date: **1/30/2021** Analysis Date: **2/1/2021** SeqNo: **2647126** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.4	75.3	105			

Sample ID: **lcs-57813** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **57813** RunNo: **74963**

Prep Date: **1/30/2021** Analysis Date: **2/1/2021** SeqNo: **2647127** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.5	80	120			
Surr: BFB	1000		1000		103	75.3	105			

Sample ID: **2101b05-002ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-1 (-1')** Batch ID: **57813** RunNo: **74963**

Prep Date: **1/30/2021** Analysis Date: **2/1/2021** SeqNo: **2647130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.30	0	97.6	61.3	114			
Surr: BFB	1000		971.8		107	75.3	105			S

Sample ID: **2101b05-002amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-1 (-1')** Batch ID: **57813** RunNo: **74963**

Prep Date: **1/30/2021** Analysis Date: **2/1/2021** SeqNo: **2647131** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.95	0	89.0	61.3	114	6.52	20	
Surr: BFB	1000		998.0		105	75.3	105	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B05**

05-Feb-21

Client: Souder, Miller & Associates

Project: Rick Deckard 2H

Sample ID: **mb-57813**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **57813**	RunNo: **74963**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2647161** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: **LCS-57813**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **57813**	RunNo: **74963**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2647162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.5	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.5	80	120			

Sample ID: **2101b05-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-1 (Surf)**	Batch ID: **57813**	RunNo: **74963**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2647164** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9785	0	93.2	76.3	120			
Toluene	0.94	0.049	0.9785	0.01026	95.1	78.5	120			
Ethylbenzene	0.95	0.049	0.9785	0	97.0	78.1	124			
Xylenes, Total	2.8	0.098	2.935	0	96.7	79.3	125			
Surr: 4-Bromofluorobenzene	0.99		0.9785		101	80	120			

Sample ID: **2101b05-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **S-1 (Surf)**	Batch ID: **57813**	RunNo: **74963**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2647165** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9756	0	92.1	76.3	120	1.56	20	
Toluene	0.93	0.049	0.9756	0.01026	94.5	78.5	120	0.888	20	
Ethylbenzene	0.93	0.049	0.9756	0	95.6	78.1	124	1.76	20	
Xylenes, Total	2.8	0.098	2.927	0	95.3	79.3	125	1.71	20	
Surr: 4-Bromofluorobenzene	0.98		0.9756		101	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates | Work Order Number: 2101B05 | RcptNo: 1

Received By: Juan Rojas 1/30/2021 9:00:00 AM

Completed By: Juan Rojas 1/30/2021 9:06:46 AM

Reviewed By: 01/30/2021

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 1/30/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good				

Chain-of-Custody Record

Client: SMA- Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 5 Day
☒ Standard ☐ Rush

Project Name: Rick Deckard 2H

Project #:

Project Manager: Ashley Maxwell

Sampler:

On Ice: ☒ Yes ☐ No

\# of Coolers: 1

Cooler Temp(including CF): 2.1-0=2.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2101B05	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/28		Soil	S-1 (surf)	4 oz	cool	-001	↓	↓					↓			
↓		↓	S-1 (-1')	↓	↓	-002	↓	↓					↓			
↓		↓	S-1 (-2')	↓	↓	-003	↓	↓					↓			
↓		↓	S-1 (-3')	↓	↓	-004	↓	↓					↓			
↓		↓	S-1 (-4')	↓	↓	-005	↓	↓					↓			
↓		↓	S-2 (surf)	↓	↓	-006	↓	↓					↓			
↓		↓	S-2 (-1')	↓	↓	-007	↓	↓					↓			
↓		↓	S-2 (-2')	↓	↓	-008	↓	↓					↓			
↓		↓	S-2 (-3')	↓	↓	-009	↓	↓					↓			
↓		↓	S-3 (Surf)	↓	↓	-010	↓	↓					↓			
↓		↓	S-3 (-1')	↓	↓	-011	↓	↓					↓			
↓		↓	S-3 (-2')	↓	↓	-012	↓	↓					↓			

Date	Time	Relinquished by	Received by	Via	Date	Time
1/29	1345	Nate Gr[illegible]	C Cummins		1/29/21	1345
1/29/21	1900	[illegible]	[illegible]	Courier	1/30/21	9:00

Remarks: Marathon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5-day
☒ Standard ☐ Rush

Project Name: Rick Deckard 2H

Project #:

Project Manager: Ashley Maxwell

Sampler:

On Ice: ~~☒~~ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.1-0=2.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2101305	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/28		Soil	S-3 (-3')	4oz	Cool	-013	11/30/21									
			~~BG-1 (6")~~			~~-014~~	~~-014~~									
			SW-1 (0-6")			~~-015~~ -014										
			SW-2 (0-6")			-015										
			SW-3 (0-6")			-016										
			SW-4 (0-6")			-017										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/29	1345	Nate Cur				
1/29/21	1900			courier	11/30/21	9:00

Remarks: Marathon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 04, 2021

Ashley Maxwell

Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-8801
FAX:

RE: Rick Deckard 2H OrderNo.: 2101B03

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/30/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2101B03**
Date Reported: **2/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG-1 (Surf)
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B03-001 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	310	60		mg/Kg	20	2/2/2021 2:10:12 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/1/2021 10:07:53 AM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 10:07:53 AM	57815
Surr: DNOP	81.4	30.4-154		%Rec	1	2/1/2021 10:07:53 AM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 1:12:23 PM	57814
Surr: BFB	94.2	75.3-105		%Rec	1	2/2/2021 1:12:23 PM	57814
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 1:12:23 PM	57814
Toluene	ND	0.049		mg/Kg	1	2/2/2021 1:12:23 PM	57814
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 1:12:23 PM	57814
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 1:12:23 PM	57814
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	2/2/2021 1:12:23 PM	57814

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B03**
Date Reported: **2/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG-1 (-1')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B03-002 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	170	60		mg/Kg	20	2/2/2021 2:22:36 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/1/2021 11:18:24 AM	57815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2021 11:18:24 AM	57815
Surr: DNOP	87.6	30.4-154		%Rec	1	2/1/2021 11:18:24 AM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 2:23:37 PM	57814
Surr: BFB	94.5	75.3-105		%Rec	1	2/2/2021 2:23:37 PM	57814
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	2/2/2021 2:23:37 PM	57814
Toluene	ND	0.049		mg/Kg	1	2/2/2021 2:23:37 PM	57814
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 2:23:37 PM	57814
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 2:23:37 PM	57814
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	2/2/2021 2:23:37 PM	57814

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2101B03**
Date Reported: **2/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG-1 (-2')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B03-003 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	2/2/2021 2:35:01 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/1/2021 11:42:10 AM	57815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2021 11:42:10 AM	57815
Surr: DNOP	92.1	30.4-154		%Rec	1	2/1/2021 11:42:10 AM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 3:34:27 PM	57814
Surr: BFB	98.2	75.3-105		%Rec	1	2/2/2021 3:34:27 PM	57814
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 3:34:27 PM	57814
Toluene	ND	0.049		mg/Kg	1	2/2/2021 3:34:27 PM	57814
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 3:34:27 PM	57814
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 3:34:27 PM	57814
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/2/2021 3:34:27 PM	57814

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B03**
Date Reported: **2/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG-1 (-3')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B03-004 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	2/2/2021 3:12:13 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	2/1/2021 12:05:50 PM	57815
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/1/2021 12:05:50 PM	57815
Surr: DNOP	94.3	30.4-154		%Rec	1	2/1/2021 12:05:50 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/2/2021 5:07:55 PM	57814
Surr: BFB	97.3	75.3-105		%Rec	1	2/2/2021 5:07:55 PM	57814
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/2/2021 5:07:55 PM	57814
Toluene	ND	0.050		mg/Kg	1	2/2/2021 5:07:55 PM	57814
Ethylbenzene	ND	0.050		mg/Kg	1	2/2/2021 5:07:55 PM	57814
Xylenes, Total	ND	0.10		mg/Kg	1	2/2/2021 5:07:55 PM	57814
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/2/2021 5:07:55 PM	57814

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101B03**
Date Reported: **2/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG-1 (-4')
Project: Rick Deckard 2H
Collection Date: 1/28/2021
Lab ID: 2101B03-005 **Matrix:** SOIL **Received Date:** 1/30/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	2/2/2021 3:24:38 PM	57845
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/1/2021 12:29:32 PM	57815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2021 12:29:32 PM	57815
Surr: DNOP	79.3	30.4-154		%Rec	1	2/1/2021 12:29:32 PM	57815
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/2/2021 5:31:14 PM	57814
Surr: BFB	97.8	75.3-105		%Rec	1	2/2/2021 5:31:14 PM	57814
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	2/2/2021 5:31:14 PM	57814
Toluene	ND	0.049		mg/Kg	1	2/2/2021 5:31:14 PM	57814
Ethylbenzene	ND	0.049		mg/Kg	1	2/2/2021 5:31:14 PM	57814
Xylenes, Total	ND	0.098		mg/Kg	1	2/2/2021 5:31:14 PM	57814
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	2/2/2021 5:31:14 PM	57814

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B03**
04-Feb-21

Client: Souder, Miller & Associates
Project: Rick Deckard 2H

Sample ID: **MB-57845**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **57845**	RunNo: **75018**							
Prep Date: **2/2/2021**	Analysis Date: **2/2/2021**	SeqNo: **2648176**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-57845**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **57845**	RunNo: **75018**							
Prep Date: **2/2/2021**	Analysis Date: **2/2/2021**	SeqNo: **2648177**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B03**

04-Feb-21

Client: Souder, Miller & Associates

Project: Rick Deckard 2H

Sample ID: **MB-57815**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646888** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.1	30.4	154			

Sample ID: **LCS-57815**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646889** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	68.9	141			
Surr: DNOP	4.6		5.000		92.5	30.4	154			

Sample ID: **2101B03-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BG-1 (Surf)**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646890** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.7	48.36	0	94.3	15	184			
Surr: DNOP	3.9		4.836		81.6	30.4	154			

Sample ID: **2101B03-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BG-1 (Surf)**	Batch ID: **57815**	RunNo: **74972**
Prep Date: **1/30/2021**	Analysis Date: **2/1/2021**	SeqNo: **2646891** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.2	46.13	0	92.3	15	184	6.83	23.9	
Surr: DNOP	3.6		4.613		78.4	30.4	154	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B03**
04-Feb-21

Client: Souder, Miller & Associates
Project: Rick Deckard 2H

Sample ID: **mb-57814** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648084** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.9	75.3	105			

Sample ID: **lcs-57814** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648085** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80	120			
Surr: BFB	1100		1000		109	75.3	105			S

Sample ID: **2101b03-002ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BG-1 (-1')** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.51	0	92.8	61.3	114			
Surr: BFB	1100		980.4		108	75.3	105			S

Sample ID: **2101b03-002amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BG-1 (-1')** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648090** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.73	0	97.3	61.3	114	5.60	20	
Surr: BFB	1100		989.1		108	75.3	105	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2101B03**
04-Feb-21

Client: Souder, Miller & Associates
Project: Rick Deckard 2H

Sample ID: **mb-57814** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648122** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **LCS-57814** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648123** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	0.97	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: **2101b03-001ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BG-1 (Surf)** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648128** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9766	0	95.8	76.3	120			
Toluene	0.97	0.049	0.9766	0.01131	98.0	78.5	120			
Ethylbenzene	0.96	0.049	0.9766	0	98.6	78.1	124			
Xylenes, Total	2.9	0.098	2.930	0.01662	98.0	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9766		103	80	120			

Sample ID: **2101b03-001amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BG-1 (Surf)** Batch ID: **57814** RunNo: **75015**
Prep Date: **1/30/2021** Analysis Date: **2/2/2021** SeqNo: **2648129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9970	0	94.6	76.3	120	0.759	20	
Toluene	0.97	0.050	0.9970	0.01131	96.1	78.5	120	0.168	20	
Ethylbenzene	0.97	0.050	0.9970	0	97.7	78.1	124	1.15	20	
Xylenes, Total	2.9	0.10	2.991	0.01662	95.5	79.3	125	0.538	20	
Surr: 4-Bromofluorobenzene	0.99		0.9970		99.0	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Souder, Miller & Associates | Work Order Number: 2101B03 | RcptNo: 1

Received By: Juan Rojas 1/30/2021 9:00:00 AM

Completed By: Juan Rojas 1/30/2021 9:09:55 AM

Reviewed By: 01/30/2021

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 1/30/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good				

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5-Day
☒ Standard ☐ Rush

Project Name: Rick Deckard ZH

Project #:

Project Manager: Ashley Maxwell

Sampler: NG

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 7.1-0=7.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2101303	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/28		Soil	BG-1 (Surf)	4oz	Cool	-001										
			BG-1 (-1')			-002										
			BG-1 (-2')			-003										
			BG-1 (-3')			-004										
			BG-1 (-4')			-005										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
1/29	1345	Nate Cox	[signature]		1/29/21	1345
1/29/21	1900	[signature]	[signature]	courier	1/30/21	9:00

Remarks: Marathon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix E

Liner Integrity Inspection

NAPP2101561606

Liner Integrity Inspection (Photos Attached)

Date: 2/5/2021 ~ 9am.

Facility: Rick Deckard State #002H

48 Hour Notification Given On: 2/2/2021 to SLO & OCD

Responsible party has visually inspected the liner	(Y)/N
Liner remains intact	(Y)/N
Liner had the ability to contain the leak in question:	(Y)/N

Notes:

- powerwashed on 1/28
- no rips/tears in liner - seams all look great
- containment - no failures/gaps

*area of overspray on pad will be addressed

Company Representative(s)

Melodie Sanjari

M. Sanjari

NAPP2101561606

NAPP2101561606

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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 18691
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
ceads	None	6/28/2021