

Incident Number: nKMW0800954755, nKMW080054324, nMLB0608954436

Assessment and Closure Closure

Sawbuck Water Transfer Section 23, Township 20 South, Range 24 East County: Eddy Vertex File Number: 22E-00123-03

Prepared for: EOG Resources, Inc.

Prepared by: Vertex Resource Services Inc.

Date: July 2023 **EOG Resources, Inc.** Sawbuck Water Transfer Assessment and Closure July 2023

Assessment and Closure Sawbuck Water Transfer Section 23, Township 20 South, Range 24 East County: Eddy

Prepared for: **EOG Resources, Inc.** 104 S. 4th Street Artesia, New Mexico 88210

New Mexico Oil Conservation Division – District 2 811 S. 1st Street Artesia, New Mexico 88210

Prepared by: Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad, New Mexico 88220

Chance Difon

Chance Dixon, B.Sc. PROJECT MANAGER, REPORTING 7/19/2023

Date

EOG Resources, Inc.	Assessment and Closure
Sawbuck Water Transfer	July 2023

Table of Contents

1.0	Introduction	.1
2.0	Incident Description	. 1
	Site Characteristics	
4.0	Closure Criteria Determination	. 2
	Remedial Actions Taken	
	Closure Request	
	References	
	Limitations	
		-

EOG Resources, Inc. Sawbuck Water Transfer

In-text Tables

- Table 1. Closure Criteria Determination
- Table 2. Closure Criteria for Soils Impacted by a Release

Vertex Figure

Vertex Table

List of Appendices

- Appendix A. NMOCD C 141 Report(s)
- Appendix B. Closure Criteria Research Documentation
- Appendix C. Daily Field and Sampling Report(s)
- Appendix D. Notification(s)
- Appendix E. Laboratory Data Report(s) and Chain of Custody Form(s)

Assessment and Closure July 2023

1.0 Introduction

EOG Resources, Inc. (EOG) retained Vertex Resource Services, Inc. (Vertex) to conduct an assessment for three historical produced water releases that occurred in 2006 at Sawbuck Water Transfer. Yates Petroleum Corporation (Yates) submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 for all three incidents. Incident ID numbers nKMW0800954755, nKMW080054324, and nMLB0608954436 were assigned to the incidents. Yates submitted a remediation work plan that was approved by NMOCD and later submitted a closure report after the remedial activities were completed.

This report provides a description of the assessment associated with the visit by Vertex. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for the closure of these incidents, with the release site also meeting requirements instituted in 2018 per 19.15.29.13 NMAC.

2.0 Incident Description

The first release (nMLB0608954436) occurred on March 5, 2006, due to power failure and tank overflow. All fluids were contained inside the containment for the battery area. Vacuum trucks were dispatched to recover the free fluids and power was restored. The incident was received by NMOCD via C-141 on March 6, 2006, with a Remediation Work Plan submitted on July 21, 2006, and NMOCD approval of the Work Plan occurring August 1, 2006.

The second release (nKMW0800954324) occurred on August 31, 2006, due to power failure and tank overflow. All fluids were contained inside the plastic-lined berms for the battery area. Vacuum trucks were dispatched to recover the free fluids and power was restored. The incident was received by NMOCD via C-141 on September 1, 2006, with closure submitted on October 9, 2006.

The third release (nKMW0800954755) occurred on September 20, 2006, due to a check valve failure that blew a 12" VIC clamp off of the gun barrel riser. All fluids were contained inside the plastic-lined berms for the battery area. Vacuum trucks were dispatched to recover the free fluids. The incident was received by NMOCD on September 22, 2006, with closure submitted on October 9, 2006.

3.0 Site Characteristics

The site is located approximately 8.16 miles southwest of Seven Rivers, New Mexico. The legal location for the site is Section 23, Township 20 South and Range 24 East in Eddy County, New Mexico. The release area is located on the Bureau of Land Management (BLM) property. An aerial photograph and site schematic are presented in Figure 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2023) indicates the site's surface geology primarily comprises Qp – Piedmont alluvial deposits (Holocene to lower Pleistocene). The predominant soil texture on the site is Pima silt and Reagan loam. The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2023).

EOG Resources, Inc. Sawbuck Water Transfer

The location was typical of oil and gas water disposals in the Permian Basin and was used for water disposal and transport.

The surrounding landscape is associated with rolling hills and fans with elevations ranging between 1,100 and 5,400 feet. The climate is semiarid with average annual precipitation ranging between 6 and 15 inches. The soil is well-drained with high runoff. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be Blue Grama. Creosote bush, mesquite, and catclaw mimosa are common shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2023).

4.0 Closure Criteria Determination

Using site characterization information, a closure criteria determination worksheet (Appendix B) was completed to determine if the releases were subject to any special case scenarios outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. The nearest groundwater data is more than 25 years old and located more than 0.5 miles away from the release site; therefore, the depth to groundwater cannot be determined accurately. The closure for the site is determined to be associated with the following constituent concentration limits (Table 1).

Table 1. Closure Criteria for Soils Impacted by a Release								
Minimum depth below any point within the horizontal boundary of the release to groundwater								
less than 10,000 mg/l TDS	Constituent	Limit						
	Chloride	600 mg/kg						
< F0 fact	TPH (GRO+DRO+MRO)	100 mg/kg						
< 50 feet	BTEX	50 mg/kg						
	Benzene	10 mg/kg						

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Site Assessment

A remediation work plan for the first release was submitted to NMOCD on July 21, 2006. The work plan was approved by NMOCD on August 1, 2006. After remedial activities for the first release were completed, the second and third releases occurred and were fully contained in the newly lined containment area. Yates Petroleum Corporation (Yates) submitted a closure report for all three Incident IDs on October 9, 2006. Details pertaining to the remedial activities for all three releases are included in the Yates work plan and closure report included in Appendix A.

EOG retained Vertex to conduct a field investigation of any possible remaining impacts at the site prior to reclamation activities being commenced. Investigation efforts began on June 2, 2023, and were finalized on June 5, 2023. Field screening was completed on a total of 3 sample points. Vertex conducted the investigation with sample points BH23-03 through BH23-05 ranging between the surface and 1 foot bgs. After the investigation was completed, it was

determined that all samples were under NMOCD's strictest closure criteria, and it was deemed that no further investigation/remedial efforts are necessary. The DFR documenting the investigation is presented in Appendix C.

Notification that confirmatory composite samples were being collected was provided to NMOCD on May 31, 2023, and is included in Appendix D. Confirmatory samples were collected at 3 sample points (boreholes) throughout the containment area of the battery. A total of 6 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody protocols and analyzed for BTEX, TPH, and chlorides. Laboratory results are presented in Table 2, and the laboratory data reports are included in Appendix E.

Field screening was completed using Dexsil PetroFlag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Hanna DiST EC Meter and HACH Chloride Test Kit (chlorides). Samples were analyzed at Hall Environmental Laboratory for BTEX (8021), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D), and total chlorides (EPA Method 300.0).

6.0 Closure Request

Vertex recommends no additional action to the site. Laboratory analyses of confirmation samples collected in the vicinities of the releases show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as presented in Table 2. There are no anticipated risks to human, ecological, or hydrological receptors at this site.

Vertex requests that these incidents (nKMW0800954755, nKMW080054324, and nMLB0608954436) be closed as all closure requirements set forth at the time were met, and there is no standing exceedances to closure criteria at the site at this time. EOG certifies that all information in this report and the appendices are correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the site.

Should you have any questions or concerns, please do not hesitate to contact Chance Dixon at 575.988.1472 or cdixon@vertex.ca.

7.0 References

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Assessment and Closure July 2023

8.0 Limitations

This report has been prepared for the sole benefit of EOG Resources, Inc (EOG). This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and EOG. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

5

Vertex Figure



Vertex Table

Table 2. Investigation Confirmatory Laboratory Results - Depth to Groundwater <50 feet bgs EOG Resources Inc. Sawbuck Water Transfer NMOCD Tracking #: nKMW0800954755, nKMW080054324, and nMLB0608954436 Project #: 22E-00123-03

Lab Reports: 2306177 and 2306399

	Sample Description					Pe	etroleum H	ydrocarbo	ns				Inorganic
Sample ID	Depth (ft)	Date	Benzene (m8/kg)	Toluene (w8/k8)	Ethylbenzene (ba/ga)	a) (a) (a) Total Xylenes	a) (gg (fotal)	මු සී Gasoline Range Organics (GRO) සී	3) Regulation (DRO) Barries (DRO)	මූ කීල් Motor Oil Range Organics (MRO) කී	(GRO + DRO) (gg/gg/) Total Petroleum Hydrocarbons (TPH) (63	(a) (chloride Concentration (de Concentration
	NMOCD - NMAC <5	0 ft 19.15.29 (2018)	10	-	-	-	50	-	-	-	-	100	600
Criteria	NMOCD - NMAC 51-2	10	-	-	-	50	-	-	-	1000	2500	10000	
	NMOCD - NMAC >1	10	-	-	-	50	-	-	-	1000	2500	20000	
Boreholes													
BH23-03	0	June 2, 2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1	June 5, 2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH23-04	0	June 2, 2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1	June 5, 2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH23-05	0	June 2, 2023	0.028	0.17	0.061	0.46	0.719	6.8	ND	ND	6.8	6.8	ND
	1	June 5, 2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NMAC - New Mexico Administrative Code (Title 19, Chapter 15, Part 29; 2018)

ND - Not Detected at the Reporting Limit

- Denotes no standard/not analyzed

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APPENDIX A - NMOCD C-141 Report and Yates Reports

Page 6

Oil Conservation Division

Incident ID	nKMW0800954755
District RP	
Facility ID	
Application ID	

Page 15 of 132

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.

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

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

X 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)

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

 $\overline{\mathbf{X}}$ 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: Chase Settle	Title: Rep Safety & Environmental Sr
Signature: Chase Settle	Date: 07/19/2023
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-703-6537</u>
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
Closure Approved by: Ashley Maxwell	7/25/2023
Closure Approved by: Ashley Maxwell Printed Name: Ashley Maxwell	Title: Environmental Specialist

Page 6

Oil Conservation Division

Incident ID	nKMW0800954324
District RP	
Facility ID	
Application ID	

Page 16 of 132

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.

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Page 6

Oil Conservation Division

Incident ID	nMLB0608954436
District RP	
Facility ID	
Application ID	

Page 17 of 132

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.

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 $\overline{\mathbf{X}}$ Description of remediation activities

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 Printed Name: Chase Settle
 Title: Rep Safety & Environmental Sr

 Signature:
 Chase Settle

 Bate:
 07/19/2023

 email:
 Chase Settle@eogresources.com

 Telephone:
 575-703-6537

 OCD Only
 Date:

 Received by:
 Date:

 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:
 Authy Mufuell

 Printed Name:
 Date:

 7/25/2023
 Title:

 Environmental Specialist



Page 18 of 132

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor

Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

Yates Petroleum Corporation 105 S. 4th Street Artesia, NM 88210 ATTN: Environmental Department (Sherry Bonham)

August 1, 2006

Reference: Sawbuck Water Transfer Station G-23-20s-24e

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a work plan proposal (plan) for remediation of a release of produced fluids that occurred at the above referenced facility. The plan proposes removal of a below grade tank located at this site and the installation of an above ground vessel to be utilized for overflow containment. The plan also proposes removal of soils with contaminants present above the OCD Recommended Remedial Action Levels (RRAL) for this site.

The plan is accepted with the following stipulations:

- Notify the OCD 24 hours prior to commencement of activities.
- Notify the OCD 24 hours prior to removal of any below grade tank or vessel. Confirmation samples are to be
 obtained from excavation prior to backfilling.
- Notify the OCD 24 hours prior to obtaining samples where analyses are to be submitted to the OCD.
- OCD is to be provided a copy of analytical results of all witnessed samples within 3 working days of operator's
 receipt of results.
- Laboratory analysis for chlorides will be required prior to closure of site.
- Submit a Final Report Form C-141 upon satisfactory completion of activities.
- Remediation requirements may be subject to change as site conditions warrant.
- Remediation to be completed by August 21, 2006.

Please be advised that NMOCD acceptance of this plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of this plan does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I can be of assistance, please contact me.

Sincerely Bennen

Mike Bratcher NMOCD District 2 1301 W. Grand Ave. Artesia, NM 88210 (505) 748-1283 Ext. 108 (505) 626-0857 Mike.Bratcher@state.nm.us

Received by OCD: 7/19/2023 11:01:56 AM

MARTIN YATES, III

FRANK W. YATES 1936-1986



S.P. YATES

JOHN A. YATES CHAIRMAN OF THE BOARD

PEYTON YATES

FRANK YATES, JR. EXECUTIVE VICE PRESIDENT

JOHN A. YATES, JR. SENIOR VICE PRESIDENT

ARTESIA, NEW MEXICO 88210-211

JUL 2 1 2006

July 21, 2006

Mr. Mike Bratcher NMOCD District II 1301 West Grand Artesia, NM 88210

Re: Sawbuck Water Transfer Section 23, T20S-R24E Eddy County, New Mexico

Dear Mr. Bratcher,

Thank you for meeting with me at the Sawbuck Water Transfer on July 10, 2006 to obtain samples for evaluating VOC levels. Based on those readings, Yates Petroleum Corporation would like to submit for your consideration the enclosed work plan for the above captioned site. Scope of work described in the plan will be initiated as soon as the work plan is approved and a contractor can be scheduled.

Should you have any questions, please don't hesitate to contact me. Thank you.

Respectfully,

Sherty

Sherry Bonham Environmental Regulatory Agent



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WORK PLAN SAWBUCK WATER TRANSFER 23 T20S R24E EDDY COUNTY, NEW MEXICO

July 20, 2006

Page 20 of 132



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Sawbuck Water Transfer Yates Petroleum Corporation July 20, 2006

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1.0	INTRODUCTION	3
2.0	BACKGROUND	3
2.1	HISTORY OF RELEASE	3
2.2	INITIAL RESPONSE ACTION TAKEN	3
3.0	SITE OBSERVATIONS	3
4.0	RECOMMENDED REMEDIAL ACTION LEVELS	4
5.0	REMEDIAL ACTION PLAN	4

Attachments

- 1. Attachment 1, C-141, March 6, 2006
- 2. Attachment 2, Figure 1 Site Map
- 3. Attachment 3, Site ID: SAWBK002 VOC readings North Overflow Berm Area
- **4.** Attachment 4, Site ID: SAWBK003 VOC readings South Overflow Berm Area

Page 21 of 132

Sawbuck Water Transfer Yates Petroleum Corporation July 20, 2006

1.0 INTRODUCTION

Page 22 of 132

Received by OCD: 7/19/2023 11:01:56 AM

This work plan for the Sawbuck Water Transfer has been developed to comply with Section VI, Section A Soil Remediation of the New Mexico Oil and Gas Conservation Division (OCD) *Guidelines for Remediation of Leaks*, *Spills and Releases* (Guidelines). This plan is based on initial reporting, visual observation, and regulations and Guidelines of the OCD.

2.0 BACKGROUND

2.1 History of Release

Yates Petroleum Corporation (Yates) is the operator of the Sawbuck Water Transfer Station. According to the C-141 filed on March 6, 2006 (Attachment 1), a release of 290 barrels produced water occurred due to a power failure causing tanks to overflow. The released water was contained within the berm.

2.2 Initial Response Action Taken

In response to the release, Yates began immediate cleanup by removing as much of the liquid as could be recovered. Approximately 260 barrels of produced water was recovered.

3.0 SITE OBSERVATIONS

On July 10, 2006 Mike Bratcher of NMOCD and Sherry Bonham of Yates Petroleum Corporation met at the Sawbuck Water Transfer. Two composite samples taken at locations specified by Mr. Bratcher were field tested using the heated headspace method to determine VOC concentrations.

A five spot composite was taken in the North Overflow Berm Area (see Attachment 2, Figure 1 Site Map). Maximum VOC concentrations were 61.5 ppm (see Attachment 3).

A three spot composite was taken in the South Overflow Berm Area (see Attachment 2, Figure 1 Site Map). Maximum VOC concentrations were 226.4 ppm (see Attachment 4).

It was noted there is an overflow pipe that could discharge into the North Overflow Berm Area. There is also an underground storage tank in the South Overflow Berm Area.

4.0 RECOMMENDED REMEDIAL ACTION LEVELS

The ranking criteria for this site is as follows (per Section IV of the Guidelines)

Depth to ground water >100' (per Chevron Texaco Water Trend Map)	0
Not in a wellhead protection area	0
Distance to surface body water <1000'	<u>0</u>
TOTAL RANKING SCORE =	0

For sites with a Total Ranking Score of **0**, the Recommended Remedial Action Levels (RRALs) are:

Benzene	10 ppm
BTEX	50 ppm
TPH	5000 ppm

5.0 REMEDIAL ACTION PLAN

Yates proposes to install an above ground containment vessel for the overflow pipe to discharge into as discussed with Mr. Bratcher. Yates also proposes removal of the existing underground storage tank which is located in the South Overflow Berm Area and re-route the line to discharge into the proposed new containment vessel as discussed with Mr. Bratcher.

Because the South Overflow Berm Area failed the VOC criteria, Yates proposes to excavate the South Overflow Berm Area until a representative sample tested in the field using the heated headspace method show readings not greater than 100 ppm. All excavated materials will be placed on plastic sheeting in a bermed area to prevent spreading contamination and/or will be disposed at a NMOCD approved offsite facility. Once these soils have been removed, the NMOCD will be contacted and given the opportunity to witness the final confirmation sampling for site closure. Confirmation samples will be collected and sent to a third party laboratory for analysis. The samples will be analyzed for TPH (GRO and DRO) by EPA Method 8015B.

If the laboratory analytical results show the soil concentrations are within the RRALs shown in section 4.0 above, excavated area will be backfilled and Yates will request closure approval from OCD per section IX of the Guidelines.

Respectfully Submitted,

Sherry Bonham Environmental Regulatory Agent

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ATTACHMENT 1

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Page 24 of 132

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,	Name of Co Address 1	05 S. 4 ⁴¹ S	t., Artosia NI	N 88210			Telephone	No. 748-4181					
	Facility Nar	no Sawbu	ck Water Tra	insfer			Facility Ty	pe Water tran	stor stat	ion			
	Surface Ow	ner Wilb	anks Ranch		Miner	al Owner	Fed			Lonso N	10.		
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					N	ATUR	E OF REL	EASE	water	Volume	Recovered 26	Obbl water	
	Type of Role	ase produ	iced water	n control	valve leaked	causing	Date and	Hour of Occurren	CC	Date and	Hour of Discov	very	
	tanks to ove	rtiaw.					03-05-06	, 0900hrs 'o Whom?		03=05-06	, 0900hrs		
	Was Immed	late Notico	Given? X	Yes N	io Not Req	uired	Mike Bra	icher, District 2)	MOCD				
	By Whom?	Dan Do	· · · · · · · · · · · · · · · · · · ·				Date and	Hour 03-06-06.	0800hrs				
	Was a Wate	rcourse Ren	iched?) Yes >			IT YES,	olume Impacting	r the Wal	ercourse.			
			npacted, Desc				•					<u> </u>	
	Power failu	re, tanks ov		er resiore	d, vacuum tru		d up free wate		est. if fou	ind good, C)CD will be not	ified for final	
	testing. Ranking fo	r this area is	a as follows; D	epth to gi	round water-0	Wellhead	d protection an	ial action taken based on that test. If found good, OCD will be notified for final protection area-0, Distance to surface water-0. Water 125'(trend map) of the best of my knowledge and understand that pursuant to NMOCD rules and applications and professions for releases which may endanger					
	regulations public heal should theil	th or the ca r operation: refirment. In	rs are required vironment. The have failed to addition. AM	to report to accepta adoquate (QCD acc	and/or the cel ince of a C-14 hydrogetigate contance of a C	l report b	y the NMOCD	ny knowledge and s and perform com marked as "Final ation that pose a t leve the operator	Report"	does not n ground wat	elleve the operation	tor of liability ar, human health	
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	Signature:	\bigwedge	1041 X				Approved	Approved by District Supervisor: by MB				A ¢	
	Printed Ne	une: Dan D	nilo					/~/		JA INIT.	HALO AN	Marcine C	
	Title: Bny	vironmental	Regulatory A	zoni				Date: 3/20/00	,	Expiratio	on Date:	N /	
	E-mail Address: ddolan@ypcnm.com					Condition	s of Approval:			Attached	严		
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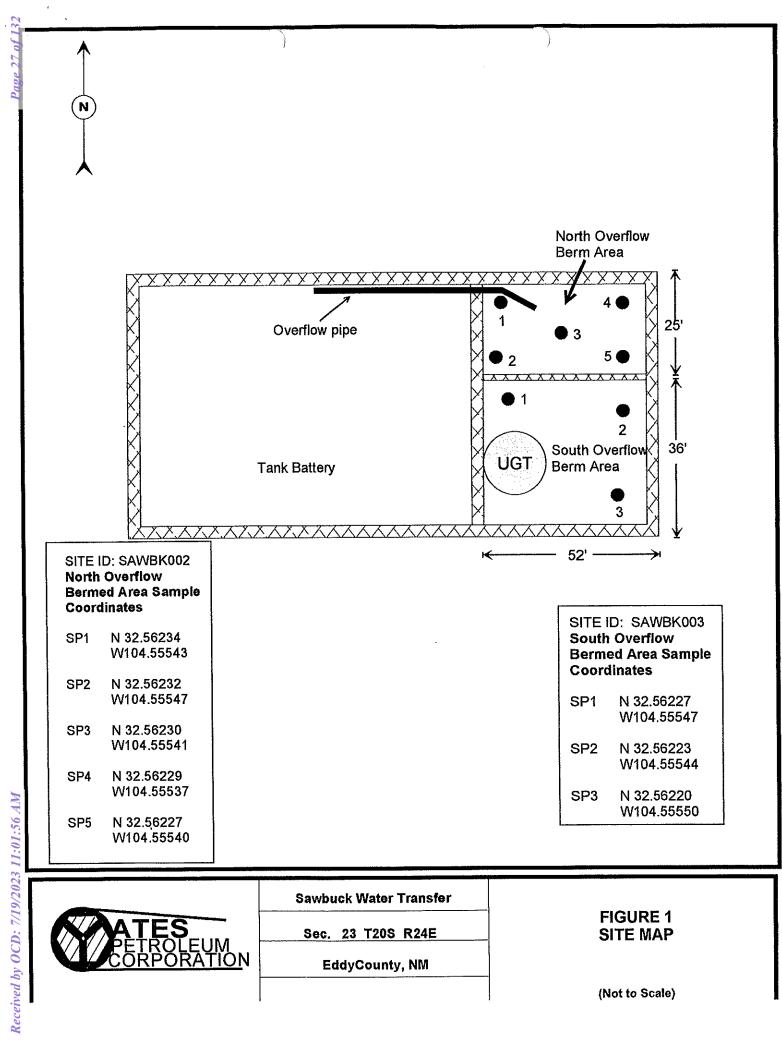
ATTACHMENT 2

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Page 26 of 132

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ATTACHMENT 3

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Page 29 of 132	Instrument: MiniRAE User ID: SHERRBON Data Points: 1 Last Calibration Tim	Site ID: SAWBK002 Gas Name: Isobutylene		Numbe 012908 Period: 60 sec	
	Measurement Type: High Alarm Levels: Low Alarm Levels:	Min(ppm) 101.0 101.0	Avg(ppm) 101.0 101.0	Max(ppm) 101.0 101.0	~
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ATTACHMENT 4

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	Instrument: MiniRAE 200 User ID: SHERRBON	00 (PGM .00) Site ID: SAWBK003	Serial	Numbe_ / 012908
)	Data Points: 1 Last Calibration Time:	Gas Name: Isobutylene 07/06/2006 14:06	Sample	Period: 60 sec
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Page 31 of 132

Sherry Bonham

 From:
 Bratcher, Mike, EMNRD [mike.bratcher@state.nm.us]

 Sent:
 Wednesday, September 20, 2006 4:27 PM

 To:
 Sherry Bonham

Subject: RE: Sawbuck Water Transfer

Sherry,

This is to confirm your notification to the OCD of the newest release at the Sawbuck Water Transfer Station and to confirm approval for an extension of time for remediation activities at this site. It appears the lined berm at this site has paid off.

Thanks,

Mike Bratcher NMOCD District 2

From: Sherry Bonham [mailto:sherryb@YPCNM.COM] Sent: Wednesday, September 20, 2006 9:49 AM To: Bratcher, Mike, EMNRD

Subject: Sawbuck Water Transfer

Good morning, Mike. Thank you for visiting with me this morning on the phone regarding the Sawbuck Water Transfer.

This e-mail is to follow up on my calling in (approx. 9:05 am) a spill on the Sawbuck Water Transfer Section 12 T20S R24E Unit G today. The approximate 50 bbl produced water spill occurred this AM 9/19/06. All fluids were contained within the lined bermed area. Vacuum trucks are in process of recovering fluids.

Thanks for the verbal approval to my request for an extension for submitting final closure on the Sawbuck Water Transfer. I ask that extension be granted until October 21, 2006. As you know, original remediation activities had been completed however, a August 31, 2006 release and now a September 19, 2006 release have interfered with submitting the final. All fluids were contained within the newly lined berms. As soon as clean-up actions are complete, I plan to submit closure request.

Thanks, Mike, for your assistance. I would appreciate a confirmation response and look forward to hearing from you.

Should you have any questions or concerns, please don't hesitate to contact me.

Sherry

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Sherry Bonham

From: Bratcher, Mike, EMNRD [mike.bratcher@state.nr	n.us	Ĺ
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Sent: Monday, August 21, 2006 8:11 AM

To: Sherry Bonham

Cc: Jerry Fanning

Subject: RE: Sawbuck Water Transfer

Sherry,

The request for an extension on this project to September 21, 2006 is approved.

Mike Bratcher NMOCD District 2



From: Sherry Bonham [mailto:sherryb@YPCNM.COM]
Sent: Friday, August 11, 2006 12:04 PM
To: Bratcher, Mike, EMNRD
Cc: Jerry Fanning
Subject: Sawbuck Water Transfer

Mike,

Soils have been excavated as per the approved workplan of July 20, 2006. I would like to take confirmation samples on Monday August 14, 2006 at 11:00 AM. I would like for this e-mail to provide the required 24 hour notification prior to obtaining the confirmation samples.

As one of the stipulations per your August 1, 2006 letter, you stated that remediation is to be completed by August 21, 2006. Due to there being a 10 day turn around period on samples and our waiting for those results of the confirmation samples, I would also like to request an extension until September 21, 2006 to complete remediation processes. Your consideration to this request is appreciated!

If you have any questions, please don't hesitate to contact me and should I not hear from you, I will assume that you are in agreement. Thanks for your help, Mike!

Sherry

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Sherry Bonham

From: Bratcher, Mike, EMNRD [mike.bratcher@state.nm.us]

Sent: Tuesday, August 01, 2006 9:50 AM

To: Sherry Bonham

Cc: Jerry Fanning

Subject: RE: Sawbuck Water Transfer

Sherry,

Attached is the approval for the July 20, 2006 work plan proposal. If you have personnel available to commence operations on August 2, 2006 please proceed. The approval stipulation to provide OCD with 24 hours notice prior to commencement of activities will be considered to have been met. A signed hard copy of the approval will be sent via mail.

Page 1 of 1

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Thanks,

Mike Bratcher NMOCD District 2

From: Sherry Bonham [mailto:sherryb@YPCNM.COM] Sent: Monday, July 31, 2006 4:47 PM To: Bratcher, Mike, EMNRD Cc: Jerry Fanning Subject: Sawbuck Water Transfer

Mike,

We have a contractor available to begin underground tank removal and remediation on the Sawbuck Water Transfer. I haven't received a work plan approval from you and am asking if you could fast track this approval. We would like to begin work as early as Wednesday, August 2, 2006.

Thanks, Mike, for your help and attention to this request! Should you have any questions/concerns, please don't hesitate to contact me.

Sherry

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NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

August 1, 2006

Yates Petroleum Corporation 105 S. 4th Street Artesia, NM 88210 ATTN: Environmental Department (Sherry Bonham)

Reference: Sawbuck Water Transfer Station G-23-20s-24e

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a work plan proposal (plan) for remediation of a release of produced fluids that occurred at the above referenced facility. The plan proposes removal of a below grade tank located at this site and the installation of an above ground vessel to be utilized for overflow containment. The plan also proposes removal of soils with contaminants present above the OCD Recommended Remedial Action Levels (RRAL) for this site.

The plan is accepted with the following stipulations:

- Notify the OCD 24 hours prior to commencement of activities.
- Notify the OCD 24 hours prior to removal of any below grade tank or vessel. Confirmation samples are to be
 obtained from excavation prior to backfilling.
- Notify the OCD 24 hours prior to obtaining samples where analyses are to be submitted to the OCD.
- OCD is to be provided a copy of analytical results of all witnessed samples within 3 working days of operator's receipt of results.
- Laboratory analysis for chlorides will be required prior to closure of site.
- Submit a Final Report Form C-141 upon satisfactory completion of activities.
- Remediation requirements may be subject to change as site conditions warrant.
- Remediation to be completed by August 21, 2006.

Please be advised that NMOCD acceptance of this plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of this plan does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I can be of assistance, please contact me.

Sincerely,

Received by OCD: 7/19/2023 11:01:56 AM

Mike Bratcher NMOCD District 2 1301 W. Grand Ave. Artesia, NM 88210 (505) 748-1283 Ext. 108 (505) 626-0857 Mike.Bratcher@state.nm.us

Oil Conservation Division * 1301 W. Grand Ave. * Artesia, New Mexico 88210 Phone: (505) 748-1283 * Fax (505) 748-9720 * http://www.emnrd.state.nm.us MARTIN YATES, III

Page 36 of

FRANK W. YATES



105 BOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118 TELEPHONE (505) 748-1471 S.P. YATES

JOHN A. YATES CHAIRMAN OF THE BOARD

> PEYTON YATES PRESIDENT

FRANK YATES, JR. EXECUTIVE VICE PRESIDENT

JOHN A. YATES, JR. BENIOR VICE PRESIDENT

October 9, 2006

Mr. Mike Bratcher NMOCD – District 2 1301 West Grand Street Artesia, NM 88210

RE: Sawbuck Water Transfer 23 T20S R24E Unit G

Dear Mike,

Yates Petroleum Corporation respectfully requests closure to three separate incidents on the above mentioned site. Please find the Final Report C 141s for release dates of March 5, 2006, August 31, 2006, and September 20, 2006 in attachment A.

For the March 5, 2006 release date, the work plan for remediation including removal of a below grade tank at this site was submitted on July 21, 2006 and approved by NMOCD on August 1, 2006. Underground tank removal and all remediation activities have since been completed as per plan. The bermed area was lined with 12 mil reinforced plastic underlayment.

According to the ChevronTexaco Eddy County Depth to Ground Water Trend Map, depth to water in this area is between 250 and 275 feet. No water wells or surface waters are located within 1,000 feet of this site. Using the NMOCD ranking criteria, site investigation and data provided, this site has a Ranking Score of **0**. The soil action levels for a site with this score are as follows:

- Benzene
- BTEX
- TPH

10 ppm 50 ppm 5000 ppm Confirmation samples (please note the sample point diagram in attachment B) taken August 14, 2006 and submitted to a third party laboratory do not exceed these criteria. The laboratory analysis is provided for your review (Attachment C).

Two additional releases occurring on August 31, 2006 and September 20, 2006 were sustained. However, both releases were contained within the newly lined bermed area. Standing fluids on both releases were vacuumed. Impacted materials of both releases were removed from the plastic liner, hauled to an OCD approved waste facility, and replaced with clean materials.

Given the analysis information and the two additional releases were contained within a plastic lined bermed area, there appears to be minimal risk to human health or the environment. In light of this evaluation, Yates Petroleum Corporation requests NMOCD grant final closure to the March 5, 2006, August 21, 2006, and September 20, 2006 releases.

Sincerely,

Sherry Bonham Environmental Regulatory Agent

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Page 37 of 132

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Page 38 of 132 1

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Attachment A

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District I 1625 N. French Dr., Hobbs, NM 88240 District II 301 W. Grand Avenue, Artesia, NM 88210 District III	Energy Mir	nerals		Resources		Form C-141 Revised October 10, 2003 Submit 2 Conjes to appropriate			
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	1220	South	vation Div St. Franc e, NM 875	is Dr.		Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form			
Re	lease Notific				ction				
			TOR			al Report 🛛 Final Report			
Name of Company YATES PETROLEUM CORPORATION	OGRID Num	ber	Contact SHERRY BONHAM						
Address 105 S. 4 TH STREET			Telephone № 505-748-14						
Facility Name SAWBUCK WATER TRANSFER	API Number		Facility Typ SWD		bining and a summer of				
Surface Owner FEDERAL	Mineral O FEDERA				Lease	No.			
		TIO	N OF REJ	LEASE					
	Unit Letter Section Township Range Feet from the North				East/West Line	County EDDY			
	Latitude		_ Longitude						
	NAT	URE	OF REL						
Type of Release PRODUCED WATER			Volume of 290 B/PW	Release		Volume Recovered 260 B/PW			
Source of Release TANK OVERFLOW			3/05/06 0			Date and Hour of Discovery 3/5/06 0900			
Was Immediate Notice Given?	No Not R	equired		ATCHER					
By Whom? DAN DOLAN			Date and I 3/6/06 09	00					
Was a Watercourse Reached?	🖾 No		If YES, V N/A	olume Impacting	the Watercourse.				
If a Watercourse was Impacted, Describe Ful N/A	ly.*			······		·····			
Describe Cause of Problem and Remedial Ac POWER FAILURE. POWER RESTORED.	tion Taken.*								
Describe Area Affected and Cleanup Action ALL FLUIDS WERE CONTAINED WITHI		JUMEI) STANDING	FLUIDS.					
SITE RANKING: 0. REMEDIATION ACTIONS COMPLETE P	ER APPROVED WO	ORK PI	LAN. FINAL	REPORT. REO	UESTING CLOS	URE.			
I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequa	ove is true and comp t and/or file certain i ance of a C-141 rep tely investigate and i ceptance of a C-141	olete to release ort by t remedia	the best of my notifications a he NMOCD n ate contaminat	knowledge and u and perform corre- narked as "Final F ion that pose a th	understand that pu ctive actions for r Report" does not r reat to ground wa	rsuant to NMOCD rules and eleases which may endanger elieve the operator of liability ter, surface water, human health			
				OIL CON	ISERVATIO	N DIVISION			
Signature: Shand a	-		Approximate	District Sumari	nor				
or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations Signature: SL Printed Name: Sherry Bonham Title: Environmental Regulatory Agent				/ District Supervi	əvi.				
			Approval D		Expiratio	n Date:			
E-mail Address: sherryb@ypcnm.com			Conditions of Approval:			Attached			
* Attach Additional Chaota If Magazana	ne: 505-748-1471		<u> </u>	······					
Auach Adultional Sheets II Necessary	:								

District I									
District I 1625 N. French Dr., Hobbs, NM 88240		ate of New Mexi)	Form C-141				
District II 2/301 W. Grand Avenue, Artesia, NM 88210 District III		nerals and Natural			Revised October 10, 2003				
1000 Rio Brazos Road, Aztec, NM 87410		Conservation Div			Submit 2 Copies to appropriate District Office in accordance				
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		South St. Franci anta Fe, NM 875			with Rule 116 on back side of form				
	Release Notific			etion					
		PERATOR			Report 🛛 Final Report				
Name of Company	OGRID Nun	nber Contact							
YATES PETROLEUM CORPORA Address	ATION 25575		SHERRY BONHAM Telephone No.						
105 S. 4 TH STREET	API Number	505-748-147 Facility Typ							
Facility Name SAWBUCK WATER TRANSFER		SWD							
Surface Owner	Mineral C	Owner		Lease N	0.				
FEDERAL	FEDERA	L							
		ATION OF REI		1 vs					
Unit Letter Section Township G 23 20S	RangeFeet from the24E	North/South Line	Feet from the	East/West Line	County EDDY				
	T - 444 3-	L av gitte da							
	Latitude			_					
Type of Release		TURE OF RELI Volume of		Volume R	lecovered				
PRODUCED WATER CRUDE OIL		395 B/PW 5 B/O		380 B/PW 4 B/O	1				
Source of Release			Iour of Occurrent		Hour of Discovery				
TANK OVERFLOW Was Immediate Notice Given?	Yes 🗌 No 🗍 Not R	If YES, To	Whom?	8/31/00 1	.00 T M				
By Whom?		Date and H	łour						
SHERRY BONHAM Was a Watercourse Reached?	·	8/31/06 3:		the Watercourse.					
	Yes No	N/A							
N/A	r .								
Describe Cause of Problem and Reme POWER FAILURE DUE TO SEVER	chial Action Taken.* RE THUNDERSTORM. R	RESULTED IN AUTO	VALVE FAILU	IRE. CLOSED MA	NUAL VALVES. VACUUM				
TRUCK AND CREW CALLED IN.									
Describe Area Affected and Cleanup ALL FLUIDS WERE CONTAINED	Action Taken.*	D REDMS STANIOR			TED MATERIALS TO BE				
REMOVED FROM PLASTIC LINE	R AND REPLACED. UPC	ON COMPLETION, F	INAL C-141 TO	BE SUBMITTED.					
SITE RANKING: 0. FINAL REPORT, REQUESTING C	LOSURE.								
I hereby certify that the information g regulations all operators are required	to report and/or file certain	release notifications a	and perform corre	ective actions for rel	eases which may endanger 👘 🚦				
public health or the environment. The	e acceptance of a C-141 rep	port by the NMOCD n	narked as "Final I	Report" does not rel	ieve the operator of liability				
or the environment. In addition, NM federal, state, or local laws and/or reg	OCD acceptance of a C-14	1 report does not relie	ve the operator of	f responsibility for a	compliance with any other				
Signature Shorry Bonham	50101151		OIL CON	SERVATION	DIVISION				
Signation Sham Bh									
Printed Name: Sherry Bonham		Approved by	y District Supervi	isor:					
	ent	Approval D	ate:	Expiration	Date:				
E-mail Address: sherryb@ypcnm.cor		Conditions							
8					Attached				
Date: October 9, 2006 * Attach Additional Sheets If Neces	Phone: 505-748-1471 ssary			-	Date: Attached				

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5 N. French Dr. Hobbe NM 88740	f New Mexic)	Form C-141	
Fine II Energy Winneral	s and Natural	Resources	Revised October 10, 2003		
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. Dama .	Fe, NM 8750		- 4		
Release Notificatio	ATOR	rrecuve A		Report X Final Report	
ame of Company OGRID Number	Contact			Report 🛛 Final Report	
ATES PETROLEUM CORPORATION 25575	SHERRY BO				
ddress 05 S. 4 TH STREET	Telephone N 505-748-147				
acility Name API Number	Facility Type)			
AWBUCK WATER TRANSFER	SWD				
urface Owner Mineral Owner EDERAL FEDERAL	r		Lease N	lo.	
	ON OF REL	EASE			
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Latitude	Longitude_				
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ype of Release	Volume of	•••••••••••••••••		ume Recovered	
RODUCED WATER	50 B/PW		47 B/PW		
ource of Release		our of Occurrent	ce Date and 9/20/06	Hour of Discovery	
UN BARREL RISER Vas Immediate Notice Given?	9/20/06 8:4 If YES, To	Whom?	9720700 1		
🛛 Yes 🗌 No 🗌 Not Requir				and the second	
By Whom? HERRY BONHAM	Date and H 9/20/06 9:	00 AM			
Vas a Watercourse Reached?	If YES, Vo N/A	lume Impacting	the Watercourse.		
f a Watercourse was Impacted, Describe Fully.* J/A		a a second definition of the second definition			
Describe Cause of Problem and Remedial Action Taken.* CHECK VALVE FAILURE BLEW 12" VIC CLAMP OFF OF GUN CALLED IN.	BARREL RISE	R. SHUT MAIN	VALVES. VACU	JUM TRUCK AND CREW	
Describe Area Affected and Cleanup Action Taken.*					
ALL FLUIDS WERE CONTAINED WITHIN PLASTIC LINED BEI REMOVED FROM PLASTIC LINER AND REPLACED. UPON CO SITE RANKING: 0.	RMS. STANDIN OMPLETION, F	IG FLUIDS VA INAL C-141 TO	CUUMED. IMPA BE SUBMITTED.	CTED MATERIALS TO BE	
FINAL REPORT. REQUESTING CLOSURE.	to the best of my	knowledge and	understand that put	rsuant to NMOCD rules and	
equisitions all operators are required to report and/or file certain relea	se notifications a	nd perform corre	ective actions for re	leases which may endanger	
public health or the environment. The acceptance of a C-141 report b should their operations have failed to adequately investigate and reme	diate contaminat	ion that pose a th	reat to ground wate	er, surface water, human health	
federal, state, or local laws and/or regulations.	ort does not reliev	ve the operator of	responsibility for	compliance with any other	
		OIL CON	SERVATION	I DIVISION	
Signature Then The					
Printed Name: Sherry Bonham	Approved by	District Superv	isor:		
Title: Environmental Regulatory Agent	Approvai Da	nte:	Expiration	n Date:	
E-mail Address: sherryb@ypcnm.com	Conditions of		Attached		
Date: October 9, 2006 Phone: 505-748-1471					
Attach Additional Sheets If Necessary					

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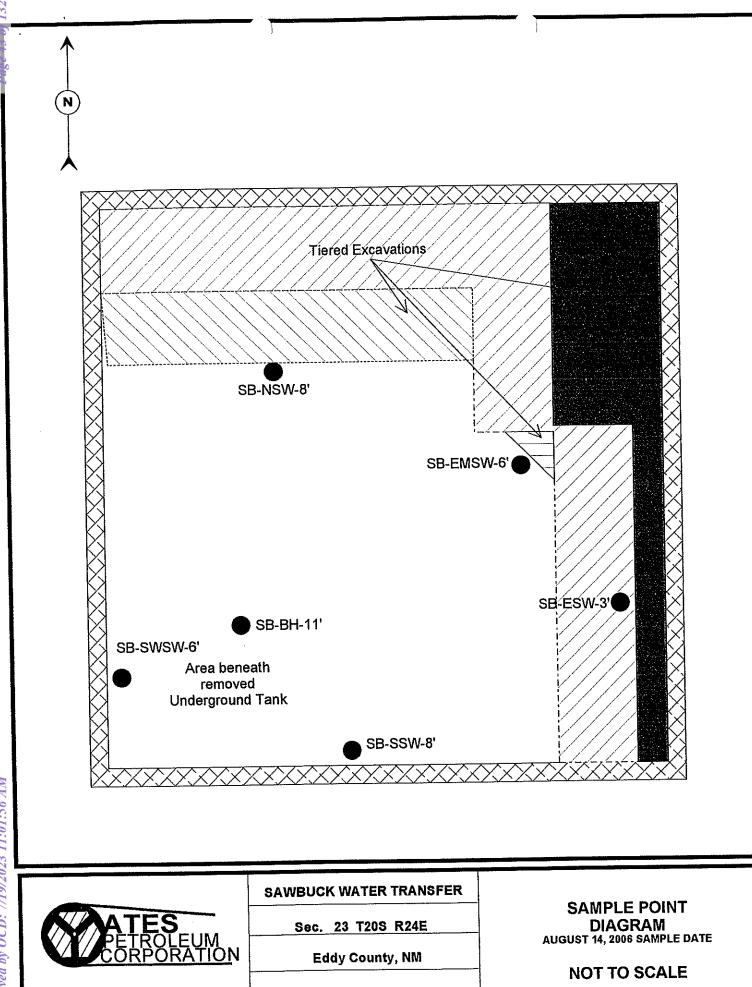
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Attachment B

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Page 44 of 132

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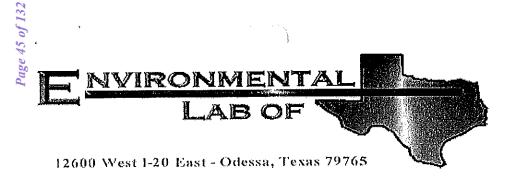
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Attachment C



Analytical Report

Prepared for:

Sherry Bonham Yates Petroleum Corp. 105 S. Fourth St. Artesia, NM 88210

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Location: Eddy County, NM

Lab Order Number: 6H15010

Report Date: 08/21/06

Yates Petroleum Corp. 105 S. Fourth St. Artesia NM, 88210

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

Fax: (505) 748-4662

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-BH-11'	6H15010-01	Soil	08/14/06 10:40	08-15-2006 10:40
SB-ESW-3'	6H15010-02	Soil	08/14/06 10:55	08-15-2006 10:40
SB-SWSW-6'	6H15010-03	Soil	08/14/06 10:25	08-15-2006 10:40
SB-SSW-8'	6H15010-04	Soil	08/14/06 10:35	08-15-2006 10:40
SB-NSW-8'	6H15010-05	Soil	08/14/06 10:45	08-15-2006 10:40
SB-EMSW-6'	6H15010-06	Soil	08/14/06 10:50	08-15-2006 10:40

Page 1 of 7

SB-BH-11' (6H15010-01) Soil Carbon Ranges C6-C10 J [2.20] 10.0 mg/kg dry 1 EH61503 08/1 Carbon Ranges >C10-C28 193 10.0 " SUrrogate: 1-Chlorooctane 106 % 70-130 "	epared Analy /15/06 08/16 " "		Notes
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Carbon Ranges >C10-C28 ND 10.0 " " "	08/15/06 08/1	в и	
Total Carbon Range C6-C28 ND 10.0 " "	ti	ei 41	
Surrogate: 1-Chlorooctane 108 % 70-130 "	ti	n <i>H</i>	
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Yates Petroleum Corp.

105 S. Fourth St.

Artesia NM, 88210

Organics by GC

Project Manager: Sherry Bonham

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-EMSW-6' (6H15010-06) Soil									
Carbon Ranges C6-C10	ND	10.0	mg/kg dry	1	EH61503	08/15/06	08/16/06	EPA 8015B	
Carbon Ranges >C10-C28	ND	10.0		¥1	"	n		11	
Total Carbon Range C6-C28	ND	10.0	ŧ1	н	51	п	н	12	
Surrogate: 1-Chlorooctane		103 %	70-1	30	17	14	ti	н	
Surrogate: 1-Chlorooctadecane		97.2 %	70-1	30	**	"	"	te	

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Page 3 of 7

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-BH-11' (6H15010-01) Soil									
% Moisture	5.1	0.1	%	۱	EH61601	08/15/06	08/16/06	% calculation	
SB-ESW-3' (6H15010-02) Soil									
% Moisture	17.4	0.1	%	1	EH61601	08/15/06	08/16/06	% calculation	
SB-SWSW-6' (6H15010-03) Soil									
% Moisture	15.9	0.1	%	1	EH61601	08/15/06	08/16/06	% calculation	
SB-SSW-8' (6H15010-04) Soil									
% Moisture	13.3	0.1	%	1	EH61601	08/15/06	08/16/06	% calculation	
SB-NSW-8' (6H15010-05) Soil									
% Moisture	10.0	0.1	%	ĩ	EH61601	08/15/06	08/16/06	% calculation	
SB-EMSW-6' (6H15010-06) Soil									
% Moisture	13.5	0,1	%	1	EH61601	08/15/06	08/16/06	% calculation	

Artesia NM, 88210

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

Organics by GC - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EH61503 - EPA 5030C (GC)										
Blank (EH61503-BLK1)				Prepared: 08	8/15/06 Ar	nalyzed: 08	/16/06			
Carbon Ranges C6-C10	ND	10.0	mg/kg wet							
Carbon Ranges >C10-C28	ND	10.0	4							
Total Carbon Range C6-C28	ND	10.0	41							
Surrogate: 1-Chlorooctane	51.9		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorooctadecane	49.2		"	50.0		98,4	70-130			
LCS (EH61503-BS1)				Prepared: 0	8/15/06 Ai	nalyzed: 08	8/16/06			
Carbon Ranges C6-C10	524	10.0	mg/kg wet	500		105	75-125			
Carbon Ranges >C10-C28	467	10.0	0	500		93.4	75-125			
Total Carbon Range C6-C28	991	10.0	n	1000		99.1	75-125			
Surrogate: 1-Chlorovctane	60,7		mg/kg	50,0		121	70-130			
Surrogate: 1-Chlorooctadecane	47,5		**	50.0		95.0	70-130			
Calibration Check (EH61503-CCVI)				Prepared: 0	8/15/06 A	nalyzed: 0	3/16/06			
Carbon Ranges C6-C10	232		mg/kg	250		92.8	80-120			
Carbon Ranges >C10-C28	283			250		113	80-120			
Total Carbon Range C6-C28	515		n	500		103	80-120			
Surrogate: 1-Chlorooctane	64.9		Π	50.0		130	70-130			
Surrogate: 1-Chlorooctadecane	59.7		*	\$0.0		119	70-130			
Matrix Spike (EH61503-MS1)	Source	: 6H1501	0-02	Prepared: 08/15/06 Analyzed: 08/16/06						
Carbon Ranges C6-C10	630	10.0	mg/kg dry	605	ND	104	75-125			
Carbon Ranges >C10-C28	549	10.0	Hł.	605	ND	90.7	75-125			
Total Carbon Range C6-C28	1180	10.0	р р	1210	ND	97.5	75-125			
Surrogate: 1-Chlorooctane	63.9		mg/kg	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	50.3		v	50.0		101	70-130			
Matrix Spike Dup (EH61503-MSD1)	Source	Source: 6H15010-02		Prepared: ()8/15/06 A	nalyzed: 0	8/16/06			
Carbon Ranges C6-C10	677	10.0	mg/kg diy	605	ND	112	75-125	7.19	20	
Carbon Ranges >C10-C28	590	10.0	81	605	ND	97.5	75-125	7.20	20	
Total Carbon Rauge C6-C28	1270	10.0	Ħ	1210	ND	105	75-125	7,35	20	
Surrogate: 1-Chlorooctane	62.3		mg/kg	50.0		125	70-130			
Surrogate: 1-Chlorooctadecane	53.7		"	50.0		107	70-130			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyle	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH61601 - General Preparation (Prep)										
Blank (EH61601-BLK1)				Prepared: (8/15/06 A	nalyzed: 08	/16/06			
% Solids	100		%							
Duplicate (EH61601-DUP1)	Source: 6H15002-01			Prepared: 08/15/06 Analyzed: 08/16/06			/16/06			
% Solids	90.3		%		89.0			1.45	20	
Duplicate (EH61601-DUP2)	Source: 6H15007-04		Prepared: 08/15/06 Analyzed: 08/16/06			/16/06				
% Solids	97,3		%		96.9			0.412	20	
Duplicate (EH61601-DUP3)	Source: 6H15013-01		Prepared: 08/15/06 Analyzed: 08/16/06		/16/06					
% Solids	90.1		%		90,1			0.00	20	

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Page 6 of 7

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

Notes and Definitions

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). J

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dıy	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dap	Duplicate

Report Approved By:

Raland K Julis Date:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

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Environmental Lab of Texas

Received by OCD: 7/19/2023 11:01:56 AM

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SB-ESW-3* 3 8/14/2006 10:55AM 1 X I S X I X X <td>101</td> <td>SB-BH-11</td> <td></td> <td></td> <td></td> <td>10;40am</td> <td></td> <td></td> <td></td> <td></td> <td>×</td> <td></td>	101	SB-BH-11				10;40am					×	
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SB-SSW-F 8: 8/14/2006 10.35AM 1 X I S X I X X <td>68</td> <td>SB-SWSW-6</td> <td></td> <td>õ</td> <td>8/14/2006</td> <td>10:25AM</td> <td>- -</td> <td></td> <td></td> <td></td> <td>×</td> <td>$\hat{}$</td>	6 8	SB-SWSW-6		õ	8/14/2006	10:25AM	- -				×	$\hat{}$
SB-NSW-6' 8' 8/14/2006 10:45AM 1 X S X N X N SB-EMSW-6' 6' 8/14/2006 10:50AM 1 X S X N X	204	SB-SSW-8'		õ	8/14/2006	10:35AM					×	
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ctions: Please analyze TPH 8015 B (GRO/DRO) not TPH 8015M. Please put chioride results on different report. ILaboratory Comments: Sample Containes Imacr Date Time Received by: Date Time Received by: Date Time Containes Imacr Date Time Received by: Date Time Received by: Date Time Container(s) & N Date Time Received by: Date Time Received by: Date Time Container(s) & N Date Time Received by: Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Date Time Received by: Contern UPS DNH Fedde Lone S Contern CONTERN CONTERN CONTERN CONTERN CONTERN CONTERN CONTERN CONTENT C	ag A	SB-EMSW-6		où	8/14/2006	10:50AM					×	
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ctions: Please analyze TPH 8015 B (GRO/DRO) not TPH 8015M. Please put chioride results on different report. Tuaboratory Comments: Sample Containes Intract? (* N VOCS Free of HeadSpace? Custody seals on container(s) Custody seals on container(s) Date Time Received by: Date Time Received												
ctions: Please analyze TPH 8015 B (GRO/DRO) not TPH 8015M. Please put chioride results on different report. Laboratory Comments: Please analyze TPH 8015 B (GRO/DRO) not TPH 8015M. Please put chioride results on different report. Tampe Containers Intact? POCS Free of Headspace? POCS Free of Headspace? POCS Free of Headspace? POCS Free of Headspace? Poster Time Received by: Date Time Received by: Date Time Received by: Date Time Received by ELDT. POLICE PLOT. POLICE PLOT.												
Control Date Time Custody seals on container(s) M 08/14/05 3:00 PM Received by: Date Time Custody seals on container(s) M 08/14/05 3:00 PM Received by: Date Time Custody seals on container(s) M 08/14/05 3:00 PM Received by: Date Time Sample Hand Delivered N 0 Date Time N Sample Hand Delivered N N n Date Time Received by: Date Time N n Date Time N N N N n Date Time N N N N	Special Instructi		1 8015	B (GR(L not	ГРН 8015M.	Please put chioride	results on differe	1	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace?	Ś	
Date Time Received by: Date Time Received by ELOT, Nourier UPS DHE Feeder Lone S Time Received by ELOT, Nourier UPS DHE Feeder Lone S Time Point Received by ELOT, Nourier No.	Relinquished by: Sherry Bonham	Date 08/14/0		Time ::00 PM				Date	ent.	Custody seals on container(Custody seals on cooler(s) Sampte Hand Delivered		
Date Time Received by ELOT. ROLLIN 1022 8/15/00 10.40 Temperadue Upon Receipt 35	Reinquished by:	Date		Tine	Received by:			Date	Time	by Sampler/Cliant Rep. 7 by Counter? UPS	X)	N ac
	Relinquished by:	Date		amil	actived by	F.K.	laig	0 B		Temperature Upon Receipt		°C

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Page 53 of 132

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Environmental Lab of Texas

Received by OCD: 7/19/2023 11:01:56 AM

Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In

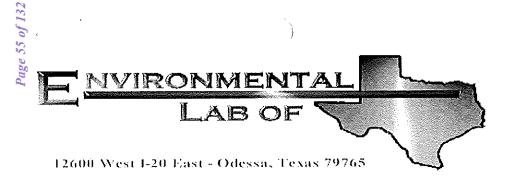
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54	Environme
Page 54 of 132	Variance/ Corrective A
ent:	VILLEB
te/ Time:	8/15/04 10:40
) ID # :	641590
ials:	

Sample Receipt Checklist

Sample Receipt	0110011100		C	ient Initials
Temperature of container/ cooler?	Yes	No	3,5 °C	
Shipping container in good condition?	Xes	/ No		
Custody Seals intact on shipping container/ cooler?	Fas	No	Not Present	
Custody Seals intact on sample bottles/ container?	Xes	No	Not Present	
Chain of Custody present?	YES .	No		
Sample instructions complete of Chain of Custody?	¥@s	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Yes	No	Not Applicable	
0 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
1 Containers supplied by ELOT?	Yes	No No	See Below	
12 Samples in proper container/ bottle?	Ves_	No	See Below	
13 Samples properly preserved?	Yes	No	See Delow	
14 Sample bottles intact?		No		·······
15 Preservations documented on Chain of Custody?		No		
16 Containers documented on Chain of Custody?		No	See Below	
17 Sufficient sample amount for indicated test(s)?	¥63	No	See Below	
18 All samples received within sufficient hold time?	Yes	No	Not Applicable	
19 VOC samples have zero headspace?			1 Horr spinouolo	.1

Variance Documentation

Contact:	 Contacted by:	Date/ Time:
Regarding:	 	
Corrective Action Taken:		
Received by OCD: 7/19/2023 11:01:00	See attached e-mail/ fax Client understands and w Cooling process had beg	ould like to proceed with analysis un shortly after sampling event



Analytical Report

Prepared for:

Sherry Bonham Yates Petroleum Corp. 105 S. Fourth St. Artesia, NM 88210

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Location: Eddy County, NM

Lab Order Number: 6H15010

Report Date: 08/21/06

Yates Petroleum Corp. 105 S. Fourth St. Artesia NM, 88210

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

Fax: (505) 748-4662

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-BH-11'	6H15010-01	Soil	08/14/06 10:40	08-15-2006 10:40
SB-ESW-3'	6H15010-02	Soil	08/14/06 10:55	08-15-2006 10:40
SB-SWSW-6'	6H15010-03	Soil	08/14/06 10:25	08-15-2006 10:40
SB-SSW-8'	6H15010-04	Soil	08/14/06 10:35	08-15-2006 10:40
SB-NSW-8'	6H15010-05	Soil	08/14/06 10:45	08-15-2006 10:40
SB-EMSW-6	6H15010-06	Soil	08/14/06 10:50	08-15-2006 10:40

Page 1 of 4

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

General Chemistry Parameters by EPA / Standard Methods

		Environn	nental I	ab of To	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-BH-11' (6H15010-01) Soil									
Chloride	642	10.0	mg/kg	20	EH61511	08/15/06	08/15/06	EPA 300.0	
SB-ESW-3' (6H15010-02) Soil									
Chloride	316	10.0	mg/kg	20	EH6[51]	08/15/06	08/15/06	EPA 300.0	
SB-SWSW-6' (61115010-03) Soil									
Chloride	362	10.0	mg/kg	20	EH61511	08/15/06	08/15/06	EPA 300.0	
SB-SSW-8' (6H15010-04) Soil									······
Chloride	869	20.0	mg/kg	40	EH61511	08/15/06	08/15/06	EPA 300.0	
SB-NSW-8' (6H15010-05) Soil									
Chloride	1090	25.0	mg/kg	50	EH61511	08/15/06	08/15/06	EPA 300.0	
SB-EMSW-6' (6H15010-06) Soil									
Chloride	191	10.0	mg/kg	20	EH61511	08/15/06	08/15/06	EPA 300.0	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH61511 - Water Extraction										
Blank (EH61511-BLK1)				Prepared &	2 Analyzed	: 08/15/06				
Chloride	ND	0,500	mg/kg						V	
LCS (EH61511-BS1)				Prepared &	z Analyzed	: 08/15/06				
Chloride	9.79	0,500	mg/kg	10.0		97.9	80-120			
Calibration Check (EH61511-CCV1)				Prepared &	2 Analyzed	: 08/15/06				
Chloride	9.49		mg/L	10.0		94.9	80-120			
Duplicate (EH61511-DUP1)	Sour	ce: 6H15002	-02	Prepared & Analyzed: 08/15/06						
Chloriđe	42.2	5.00	mg/kg		43.4			2,80	20	
Duplicate (EH61511-DUP2)	Sour	ce: 6H15010	-01	Prepared &	2 Analyzed	: 08/15/06				
Chloride	647	10.0	mg/kg		642			0.776	20	
Matrix Spike (EH61511-MS1)	Sour	ce: 6H15002	-02	Prepared &	è Analyzed	: 08/15/06				
Chloride	149	5,00	mg/kg	100	43.4	106	80-120			
Matrix Spike (EH61511-MS2)	Sour	ce: 6H15010	-01	Prepared &	k Analyzed	: 08/15/06				
Chloride	900	10.0	mg/kg	200	642	129	80-120			S-

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Project: Sawbuck Water Transfer Project Number: G-23-20S-24E Project Manager: Sherry Bonham

Notes and Definitions

- S-07 Recovery outside Laboratory historical or method prescribed limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:

Raland K Juli Date: ____

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Received by OCD: 7/19/2023 11:01:56 AM

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

8/21/2006

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Project	Project Manager:	Sherry Bonham												n .	oject	Пåп	ගි ම	Project Name: Sawbuck Water Transfer	≶ ð	later	<u>a</u>	lster				
Compa	Company Name	Yates Petroleum Corporation	uo												4	oject	の #	Project #: G-23-20S-24E	OS-2	μ						
Compai	ny Address:	Company Address: 105 S 4th Street								İ					Proje	ct Lo	ш С	Project Loc: Eddy County	sunty							
City/State/Zip:	ate/Zip:	Artesia, NM 88210														04		PO #: 1032<20								
Telephone No:	one No:	505-748-4162 or 505-513-1529	1529			Fax No: 505-748-4585	505-7	48-45	35					Report Format:	t For	nat:	D	 Standard 	dard	(]		Δ.	Ē	NPDES		
Sample	Sampler Signature	D- Z	R			e-mail: sheryb@ypcnm.com	Grads	'b@y⊑	Conm	щ					L				Ana	Analvze For	ō					r
(laò use only)	1, t/15012.						ļ										TCLP.			\mathbb{H}					\$14 82	
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(yino əzu dai) # 8A.l	PIEL	FIELD CODE	វាឮ១០ ពួករាពរខ្មែទង	ntqaO pribn∃	Delqmis See	bəlqme2 əmi7	No. of Containers	HI4O ¹	HCI	*0S ⁴ 1	TOssien HOwn	Pinok	OWe Chinking Water SLASTudge Other (Spocify)	hPettonPodable: S=Saffsold		Calions (Ca, Mg, Va, K)	SAR (ESP (CEC Anions (Cl, SOA, CO3, HCO3)	Metals: As Ag Ba Cd Cr Pb Hg	selitsiov	editelovimos BTEX 80218/5030 nr BTEX 82/8	BCI	M.B.O.N	.sobixid0.		as (oluberto2.org) TAT HSUA	TAT bisbriet2
P	SB	SB-BH-11'		1.	8/14/2006	10:40am	-	 ×						s	X								X			\times
5	-BS	SB-ESW-3'		ē.	8/14/2006	10:55AM	+	×						S	×								×		_	_×
66	SB-S	SB-SWSW-6		9	8/14/2006	10:25AM								თ	×								×			×
to	SB-	SB-SSW-8'		ō	8/14/2006	10:35AM		×						S	×								×		_	\times
50	SB-	SB-NSW-8'		δΩ	8/14/2006	10:45AM	·							S	×							$\hat{}$	×		-+	<u> </u>
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Relinquished by:		Date		Time	Received by:								Date	-	Yime		insto	N Sea	no si	tuo:	siner(6) D		
Sherry Bonham		08/14/05	3,0	3:00 PtM													usto	y sea e Han	d Dei	cool(ivere	d S S S S S			භ	ZZ	
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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Received by OCD: 7/19/2023 11:01:56 AM Environmental Lab of Texas

Page 60 of 132

Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In

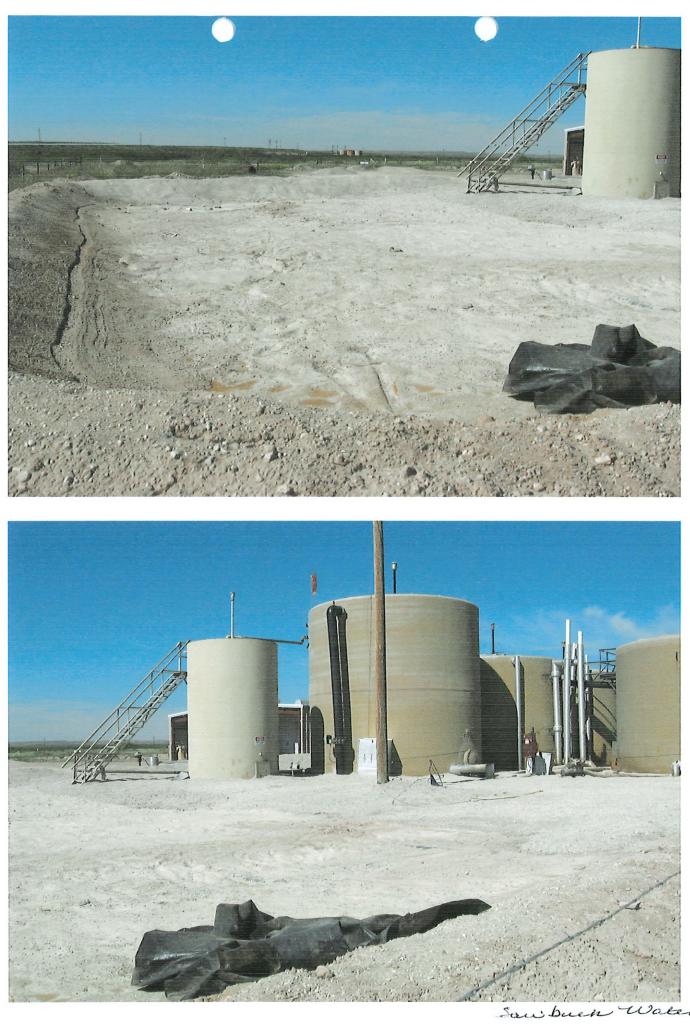
Page 61 of 132	
e 61	Environm
Pag	Variance/ Corrective
ient:	Vates
ate/ Time:	18/15/00 10:40
ıb ID # :	6411590
itials:	VL

Sample Receipt Checklist

			Client	Initials
Temperature of container/ cooler?	Yes	No	3.5 °C	
2 Shipping container in good condition?	Xes	No		
3 Custody Seals intact on shipping container/ cooler?	Fas	No	Not Present	
4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
5 Chain of Custody present?	¥@s	No		
3 Sample instructions complete of Chain of Custody?	Yes	No		
7 Chain of Custody signed when relinquished/ received?	¥е ђ	No		
8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
9 Container label(s) legible and intact?	X≉ess	No	Not Applicable	
10 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
11 Containers supplied by ELOT?	Yes	No		
12 Samples in proper container/ bottle?	YES	No	See Below	
13 Samples properly preserved?	Yes	No	See Below	
14 Sample bottles intact?	Yes	No_		
15 Preservations documented on Chain of Custody?	Yes	No		
16 Containers documented on Chain of Custody?) (Ēs	No		
17 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
t18 All samples received within sufficient hold time?	¥e3	No_	See Below	
419 VOC samples have zero headspace?	Yes	No	Not Applicable	

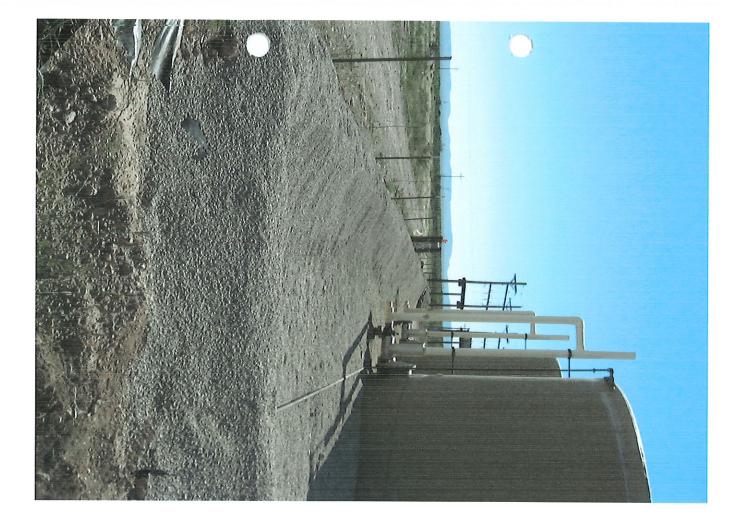
Variance Documentation

Contact:	,	Contacted by:	Date/ Time:
Regarding:	.		·
Corrective Action Taken:			
<u> </u>			
Received by OCD: 7/19/2023 11:01:36 A		See attached e-mail/ fax Client understands and would like Cooling process had begun shortly	



be 10-3-06



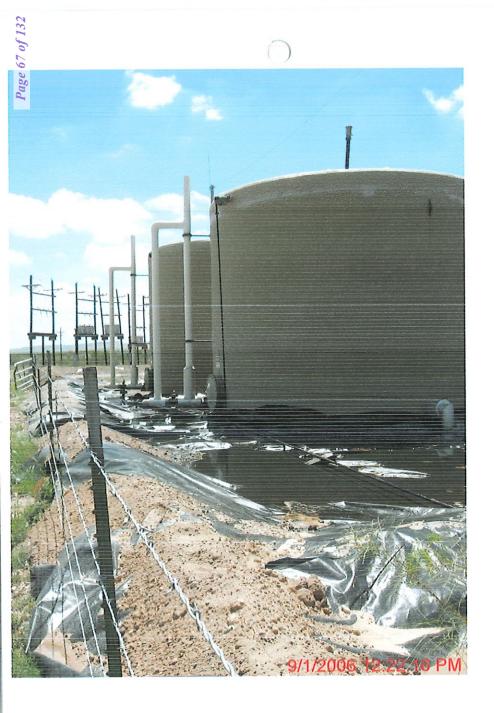


Sawbuck Water

Solution Energy Minera Energy Minera	als a	nd Natura	vision and and a second	PESIA EESIA	AG 30 31 -	Form C-141 Revised October 10, 2003 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form	
Release Notificat	ion	and Ca	greagive A	ction	3		
OPE		<u>for</u>	C.	<u></u> 8] Initia	Report 🔲 Final Report	
Name of Company OGRID Number YATES PETROLEUM CORPORATION 25575		Contact HERRY B	ONHAM	1.			
Address	Т	'elephone I	No.			· · · · · · · · · · · · · · · · · · ·	
105 S. 4 TH STREETFacility NameAPI Number		505-748-1471 Facility Type					
SAWBUCK WATER TRANSFER		WD					
Surface OwnerMineral OwnerFEDERALFEDERAL	er				Lease N	lo.	
LOCATI	ION	OF REI	LEASE				
Unit Letter GSection 23Township 20SRange 24EFeet from the NoNo	orth/S	outh Line	Feet from the	East/We	est Line	County EDDY	
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Type of Release		Volume of		-	Volume F	Recovered	
PRODUCED WATER		50 B/PW			47 B/PW		
Source of Release						nd Hour of Discovery	
GUN BARREL RISER Was Immediate Notice Given?		9/20/06 8:45 AM 9/20/06 8:45 AM If YES, To Whom?					
🛛 Yes 🗌 No 🗌 Not Requir	red	MIKE BRA					
By Whom? SHERRY BONHAM		Date and H 9/20/06 9:					
Was a Watercourse Reached?		If YES, Volume Impacting the Watercourse. N/A					
If a Watercourse was Impacted, Describe Fully.*							
N/A Describe Cause of Problem and Remedial Action Taken.* CHECK VALVE FAILURE BLEW 12" VIC CLAMP OFF OF GUN CALLED IN. Describe Area Affected and Cleanup Action Taken.*	BAR	REL RISEI	R. SHUT MAIN	VALVES	. VACU	UM TRUCK AND CREW	
ALL FLUIDS WERE CONTAINED WITHIN PLASTIC LINED BEI REMOVED FROM PLASTIC LINER AND REPLACED. UPON CO SITE RANKING: 0.	RMS. OMPI	. STANDIN LETION, FI	IG FLUIDS VAC NAL C-141 TO I	UUMED. BE SUBM	IMPAC	TED MATERIALS TO BE	
I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain releas public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remed or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	se not y the diate	tifications a NMOCD m contaminati	nd perform correc arked as "Final R on that pose a thr e the operator of i	tive action eport" doe eat to grou responsibi	ns for rele es not reli and water lity for co	cases which may endanger eve the operator of liability , surface water, human health	
		pproved by	District Supervise	or:			
Printed Name: Sherry Bonham	+						
Title: Environmental Regulatory Agent	Α	pproval Dat	e:	Ex	piration	Date:	
E-mail Address: sherryb@ypcnm.com	c	onditions of	Approval:			Attached	
Date: September 22, 2006 Phone: 505-748-1471							

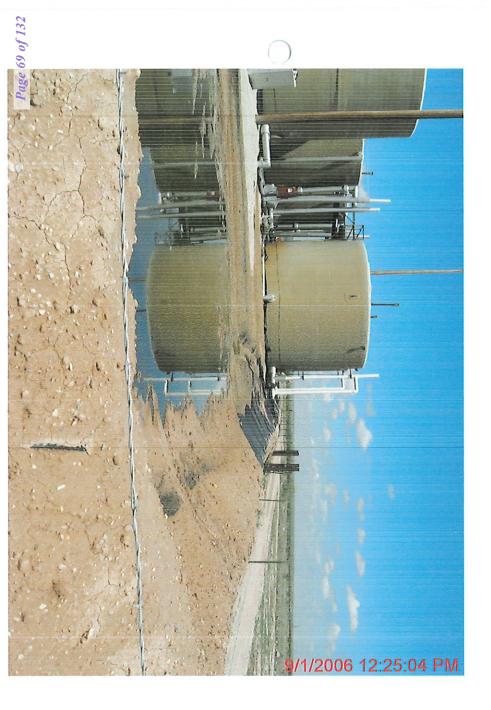
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			Rele				orrective A	ction				
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105 S. 4 TH S Facility Nar				API Number		505-748-1471 Facility Type						
		TRANSFE	٤			SWD						
Surface Ow FEDERAL	ner			Mineral C FEDERA					Lease No.			
				LOCA	ATIC	ON OF RE	LEASE					
Unit Letter G	Section 23	Township 20S	Range 24E	Feet from the	Nort	th/South Line	Feet from the	East/We	est Line	County EDDY		
			L	Latitude		Longitud	e	_				
4				NAT	URI	E OF REL						
Type of Release PRODUCED WATER						Volume o 395 B/PW			Volume Recovered 380 B/PW			
CRUDE OIL					5 B/O				B/O ate and Hour of Discovery			
Source of Release TANK OVERFLOW						8/31/06 1:00 PM 8/31/06 1:00 PM						
Was Immedi	ate Notice (Yes [] No 🗌 Not R	eauire	If YES, To Whom? ed MIKE BRATCHER						
By Whom?						Date and						
SHERRY BO Was a Water		ched?				8/31/06 3:15 PM If YES, Volume Impacting the Watercourse.						
						N/A	8					
N/A		pacted, Descr	ē.									
	LURE DU				ESUL	TED IN AUT) VALVE FAILU	RE. CLO	SED MA	NUAL VALVES. VACUUM		
ALL FLUID	S WERE C		WITHIN	PLASTIC LINED			NG FLUIDS VAO FINAL C-141 TO			CTED MATERIALS TO BE		
regulations a public health should their or the enviro	Il operators or the envi operations I nment. In a	are required to ronment. The nave failed to	o report a acceptan adequatel DCD acce	nd/or file certain i ce of a C-141 rep y investigate and i	release ort by remedi	e notifications the NMOCD iate contamina	and perform corre narked as "Final F tion that pose a the ve the operator of	ctive actio Report" do reat to gro responsib	ns for rel es not rel und wate ility for c	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health compliance with any other		
Signature Show Burk						OIL CONSERVATION DIVISION						
Printed Nam	e: Sherry B	onham				Approved b	y District Supervis	sor:				
Title: Enviro	nmental Re	gulatory Age	nt			Approval D	Approval Date: Expiration			ion Date:		
		@ypcnm.con				Conditions of Approval:				Attached		
Date: Septer Attach Add		ets If Medes		<u>ca Open</u>	nn	ifer Pa	lina 9.1-	OG SM				

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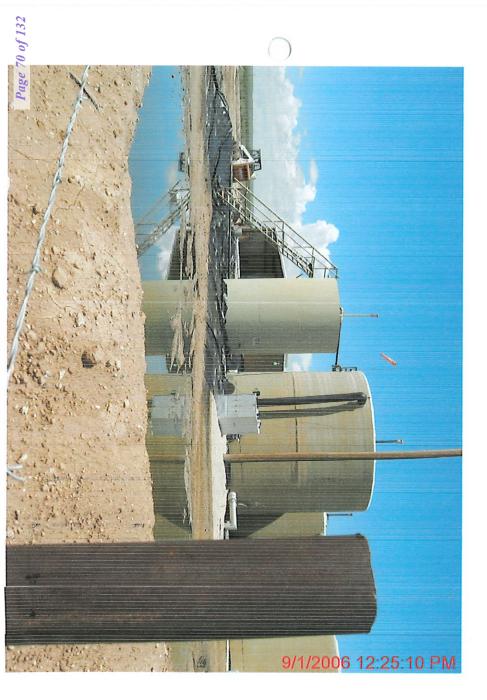


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1220 S. St. Francis D., Santa Fe, NM 87505 Santa Fe, NM 87505<						
LB 06089 53556 OPERATOR X Initial Report Fit Name of Company Yates Petroleum Corp. Contact Dan Dolan Address Ios S. 4 ^m St., Artesia NM 88210 Telephone No. 748-4181 Facility Name Sawbuck Water Transfer Facility Type Water transfer station Ios S. 4 ^m St., Artesia NM 88210 Lease No. Surface Owner Wilbanks Ranch Mineral Owner Fed Lease No. Init Letter Section Township Range Peet from the East/West Line County 23 20S 24B Peet from the Lease Doble water County Eddy Volume of Release produced water Volume of Release 290bbl water Volume Recovered 260bbl water Date and Hour of Occurrence Oarks to overflow. Date and Hour of Occurrence Date and Hour of Discovery Was Immediate Notice Given? X Yes No Not Required Mike Bratcher, District 2 NMOCD By Whom? Dan Delan Date and Hour 03-06-06, 0800hrs Date and Hour 03-06-06, 0800hrs Was a Watercourse Resched? If YES, Volume Impacting the Watercourse. Totes, Volume Impacting the Watercourse.						
Address 105 S. 4 ^m St., Artesia NM 88210 Telephone No. 748-4181 Facility Name Sawbuck Water Transfer Facility Type Water transfer station Surface Owner Wilbanks Ranch Mineral Owner Fed Lease No. Surface Owner Wilbanks Ranch Mineral Owner Fed Lease No. Unit Letter Section Township Range Peer from the North/South Lin Feet from the East/West Line County 20S 24E Feet from the North/South Lin Feet from the East/West Line County Eddy 23 Latitude _ Longitude _ NATURE OF RELEASE Volume of Release 290bbl water Volume Recovered 260bbl water Source of Release Power failure, main control valve leaked causing tanks to overflow. Date and Hour of Occurrence 03-05-06, 0900hrs Date and Hour of Discovery 03-05-06, 0900hrs 03-05-06, 0900hrs Was Immediate Notice Given? X Yes Not Required Mike Bratcher, District 2 NMOCD By Whom? Dan Dolan Date and Hour 03-06-06, 0800hrs Watercourse.	inal Repo					
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X Yes No Not Required Mike Bratcher, District 2 NMOCD By Whom? Dan Dolan Date and Hour 03-06-06, 0800hrs Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.						
By Whom? Dan Dolan Date and Hour 03-06-06, 0800hrs Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.						
Describe Cause of Problem and Remedial Action Taken.* Power failure, tanks overflowed. Power restored, vacuum trucks picked up free water. Describe Area Affected and Cleanup Action Taken.* Area was inside good berm, will be field tested for chloride, and remedial action takon based on that test. If found good, OCD will be notified for testing. Describe failure failure for the same describe the same describe action taken based on that test. If found good, OCD will be notified for testing.	ər final					
Ranking for this area is as follows; Depth to ground water-0, Weilhead protection area-0, Distance to surface water-0. Water 125'(trend map) I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rule:						
	lability an health					
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for reloases which may enda public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of lia should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition, NMOCCO acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot federal, state, or local laws ant/or regulations.						
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of lia should their operations have failed to antiquately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition, MOGD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot	Approved by District Supervisor:					
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public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of lias should their operations have failed to an quately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot federal, state, or local laws add/or regulations. Signature: OIL CONSERVATION DIVISION Signature: OIL CONSERVATION DIVISION Printed Name: Dan Dolan Approved by District Supervisor:	and the					
Printed Name: Dan Dolan Printed Name: Dan Dolan The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of lia should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot rederal, state, or local laws add/or regulations. OIL CONSERVATION DIVISION Signature: Printed Name: Dan Dolan	<u></u>					
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of lias should their operations have failed to antiquately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot federal, state, or local laws and/or regulations. Signature: OIL CONSERVATION DIVISION Signature: OIL CONSERVATION DIVISION Printed Name: Dan Dolan Approved by District Supervisor: Title: Bnvironmental Regulatory Agent B-mail Address: dolan@ypenm.com Date: 03-06-06 Phone: 748-4181 Phone:						
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liad to interquately investigate and remediate contamination that pose a threat to ground water, surface water, huma or the environment. In addition NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any ot federal, state, or local laws and/or regulations. Signathre: OIL CONSERVATION DIVISION Signathre: TIM GUM Printed Name: Dan Dolan Approved by District Supervisor: Title: Environmental Regulatory Agent E-mail Address: dolan@ypcnm.com						

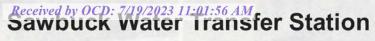


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APPENDIX B – Closure Criteria Research Documentation

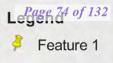
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te Nan	ne: Sawbuck Water Transfer Station			
oill Coc	ordinates:	X: 32.562300	Y: -104.556110	
te Spe	cific Conditions	Value	Unit	
1	Depth to Groundwater	<50	feet	
2	Within 300 feet of any continuously flowing	46,667	feet	
Z	watercourse or any other significant watercourse	40,007		
3	Within 200 feet of any lakebed, sinkhole or playa lake	46,667	feet	
5	(measured from the ordinary high-water mark)	40,007		
4	Within 300 feet from an occupied residence, school,	20,067	feet	
I	hospital, institution or church	20,007		
	i) Within 500 feet of a spring or a private, domestic			
5	fresh water well used by less than five households for	6,074	feet	
5	domestic or stock watering purposes, or			
	ii) Within 1000 feet of any fresh water well or spring		feet	
	Within incorporated municipal boundaries or within a			
	defined municipal fresh water field covered under a		(Y/N)	
6	municipal ordinance adopted pursuant to Section 3-27-	No		
	3 NMSA 1978 as amended, unless the municipality			
	specifically approves			
7	Within 300 feet of a wetland	756	feet	
8	Within the area overlying a subsurface mine	No	(Y/N)	
			Critical	
9	Within an unstable area (Karst Map)	High	High	
5		111611	Medium	
			Low	
10	Within a 100-year Floodplain	500	year	
10		500	ycui	
11	Soil Type	Pima silt loam a	nd Reagan loam	
11				
12	Ecological Classification	Loamy and	Bottomland	
12			bottonnana	
13	Geology	a	lp	
			<50'	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	51-100'	
			>100'	



0.5 mile Radius Well within radius is older than 25 years

27



Picket Rd

Picket

Sawbuck Water Transfer Station

27

27

323341104330401

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2000 ft

N

New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)					2=NE≑ st to lai	3=SW 4=SE rgest) (NA) AD83 UTM in me	eters)	(1	In feet)	
POD Number	POD Sub- Code basin Cou		Q (: Tws	Rna	Х	Y	Distance		Depth Water (Water Column
RA 04742	RA EI	-			20S	-	542408	3603517* 🌍	993	300		
RA 07771	RA EI	5 4	1	4 22	20S	24E	540073	3602194* 🌍	1727			
RA 05146	RA EI	2	1	2 14	20S	24E	541600	3604734* 🌍	1883	300	80	220
RA 05424	RA EI	5 4	2	3 22	20S	24E	539669	3602194* 🌍	2106	1000	400	600
RA 04502	RA EI	0	2	2 25	20S	24E	543656	3601480* 🌍	2413	300	268	32
RA 10140	RA EI	2	1	1 35	20S	24E	540938	3599981* 🌍	2962	295		
RA 10139	RA EI	3	3	2 21	20S	24E	538285	3602597* 🌍	3394	308		
RA 02775	RA CH	H 1	4	3 21	20S	24E	537899	3601986* 🌍	3869	140	31	109
RA 04956	RA EI)	1	1 21	20S	24E	537605	3603101* 🌍	4072	1013		
RA 10618	RA EI	D 1	1	4 20	20S	25E	546389	3602414 🌍	4739	342	212	130
RA 05038	RA EI	D 1	1	4 20	20S	25E	546390	3602416* 🌍	4740	314	228	86
RA 05057	RA EI)	3	3 31	20S	25E	544071	3598678* 🌍	4815	380	312	68
RA 09978	RA EI	3	1	2 29	20S	25E	546393	3601410* 🌍	4938	350		
								Avera	ge Depth to	Water:	218	feet
									Minimum	Depth:	31	feet
									Maximum	Depth:	400 1	feet
Record Count: 13												

UTMNAD83 Radius Search (in meters):

Easting (X): 541670

Northing (Y): 3602852

Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/11/21 12:02 PM

Page 75 of 132



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

	Mahaw	Decentrates
0565	water	Resources

Groundwater	~	United State
Data Category:		Geographic Ar

hic Area: States

GO

Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News 🔊

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

Search Results -- 1 sites found

site_no list =

• 323341104330401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 323341104330401 20S.24E.23.21444

Available data for this site Groundwater: Field measurements 🗸 GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°33'41", Longitude 104°33'04" NAD27

Land-surface elevation 3,617 feet above NAVD88

The depth of the well is 272 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

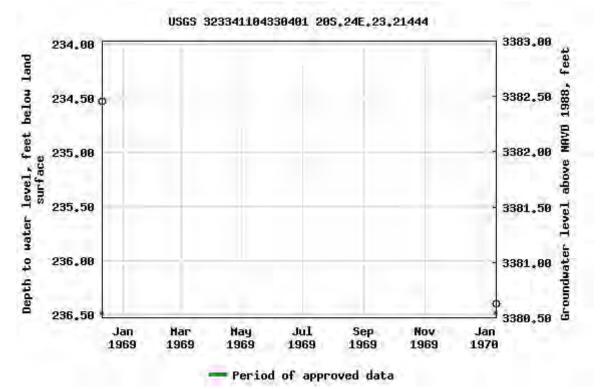
Output formats

<u>Table of data</u>

Tab-separated data

<u>Graph of data</u>

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms Subscribe for system changes News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

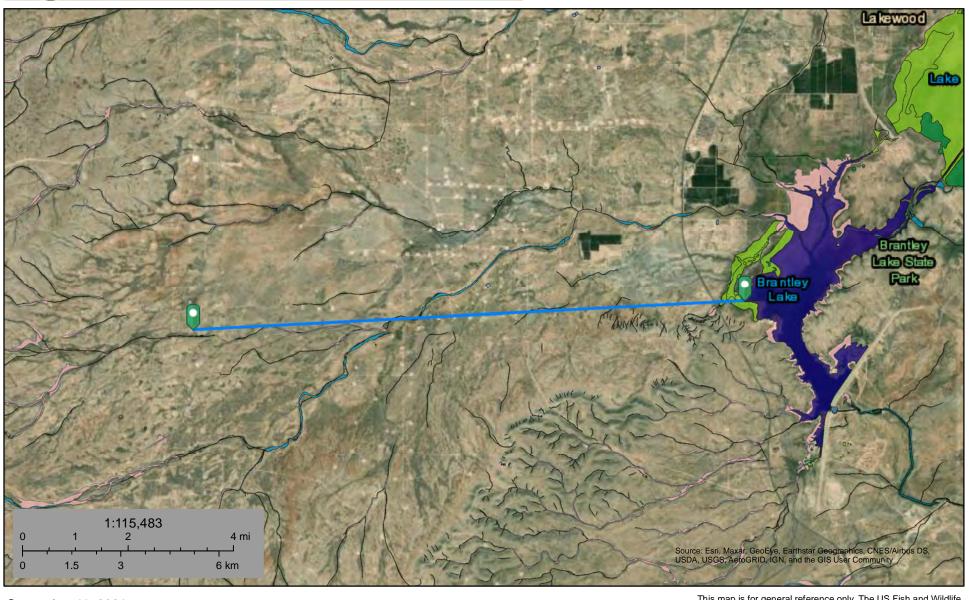
Page Contact Information: USGS Water Data Support Team Page Last Modified: 2021-09-13 14:13:21 EDT 0.61 0.51 nadww01



U.S. Fish and Wildlife Service

National Wetlands Inventory

Sawbuck Watercourse 46,667ft.



September 11, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Forested/Shrub Wetland
 - **Freshwater Pond**

Freshwater Emergent Wetland

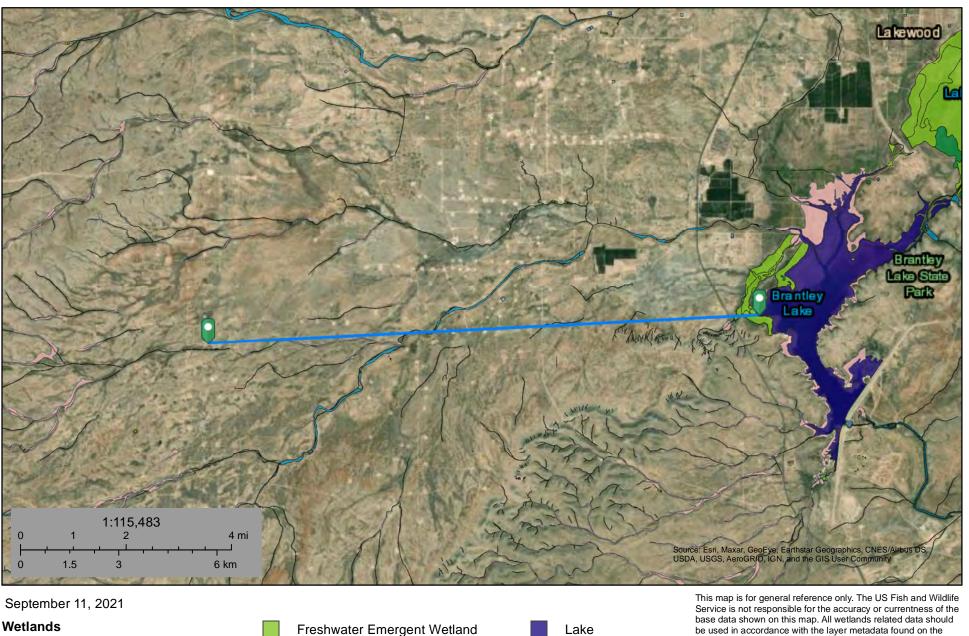
Lake Other Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI) This page was produced by the NWI mapper

U.S. Fish and Wildlife Service National Wetlands Inventory

Sawbuck Lake 46,667ft.



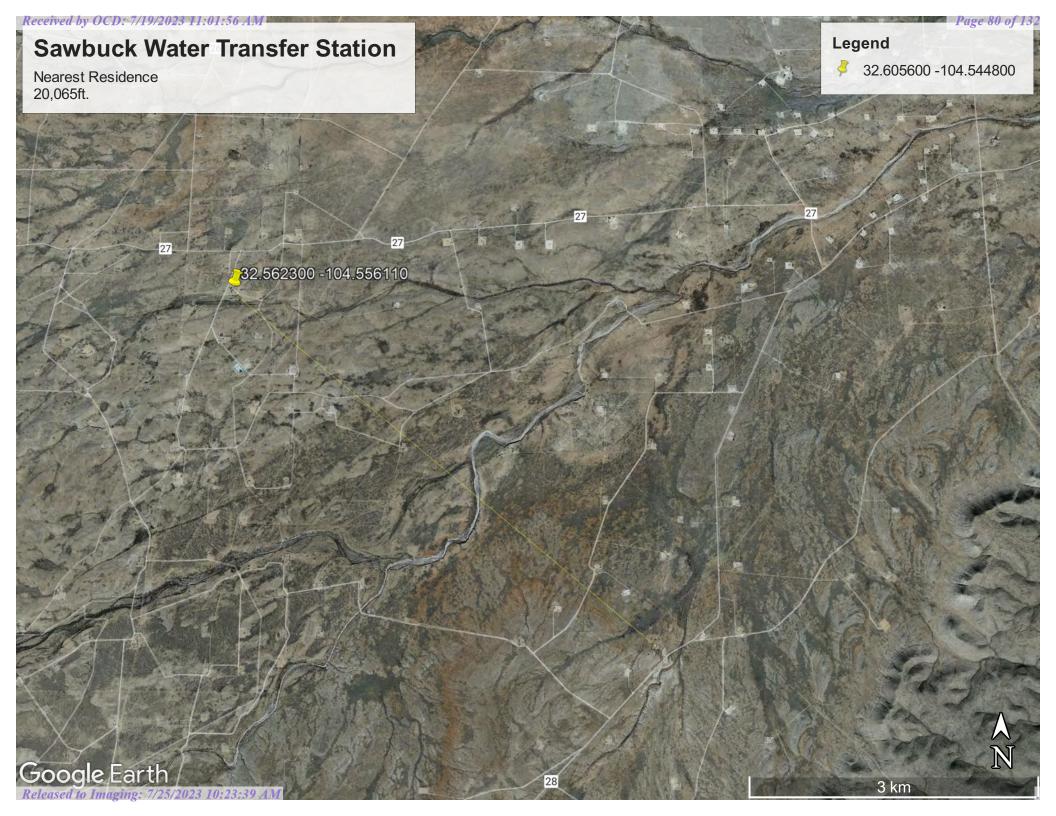
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- **Freshwater Pond**

Freshwater Forested/Shrub Wetland

Lake Other Riverine base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Released to Imaging: 7/25/2023 10:23:39 AM





New Mexico Office of the State Engineer Active & Inactive Points of Diversion

(with Ownership Information)

				(R=POD has bee and no longer se	en replaced erves this file, (quarters are 1=NW 2=NE 3=SW	4=SE)
	(acre ft	per annum)		C=the file is close	ed) (quarters are smallest to largest)	(NAD83 UTM in meters)
	Sub			Well	qqq	
WR File Nbr	basin Use Div	ersion Owner	County POD Number	Tag Code Grant	Source 6416 4 Sec Tws Rng	X Y Distance
RA 04820	RA STK	3 LOYD FOSTER	ED <u>RA 04820</u>		3 2 23 20S 24E	541596 3602701* 😜 168
RA 04742	RA STK	3 LOYD FOSTER	ED <u>RA 04742</u>		Shallow 3 3 13 20S 24E	542408 3603517* 😑 993

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 541670

Northing (Y): 3602852

Radius: 1610

Sorted by: Distance

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

New Mexico Office of the State Engineer Point of Diversion Summary

Drill Start D Log File Da Pump Type	te: 05/17/1968	Drill Finish Date: PCW Rcv Date: Pipe Discharge Size	05/06/1968	Plug Date: Source: Estimated Yield	Shallow
Drill Start D	ate: 04/23/1968	Drill Finish Date:	05/06/1968	Plug Date:	
			0=/00//000		
Driller Licer Driller Nam		Driller Company: (OSBOURN DRILI	LING & PUMP CO.	
Well Tag	POD Number RA 05146	(quarters are smalle Q64 Q16 Q4 Se 1 2 14	c Tws Rng	NAD83 UTM in meters) X Y 541600 3604734*	•

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Received by OCD: 7/19/2023 11:01:56 AM Sawbuck water Transfer Station

Nearest Town: Seven Rivers, NM Distance: 8.15 miles (43,046 feet)

23

26

Legena³ of 132

285)

A

N

23

28A

27

F. BS. HATZER

Seven Rivers

R Hwy

285

3 mi

Sawbuck Water Transfer Station



U.S. Fish and Wildlife Service

Sawbuck Wetland 756ft



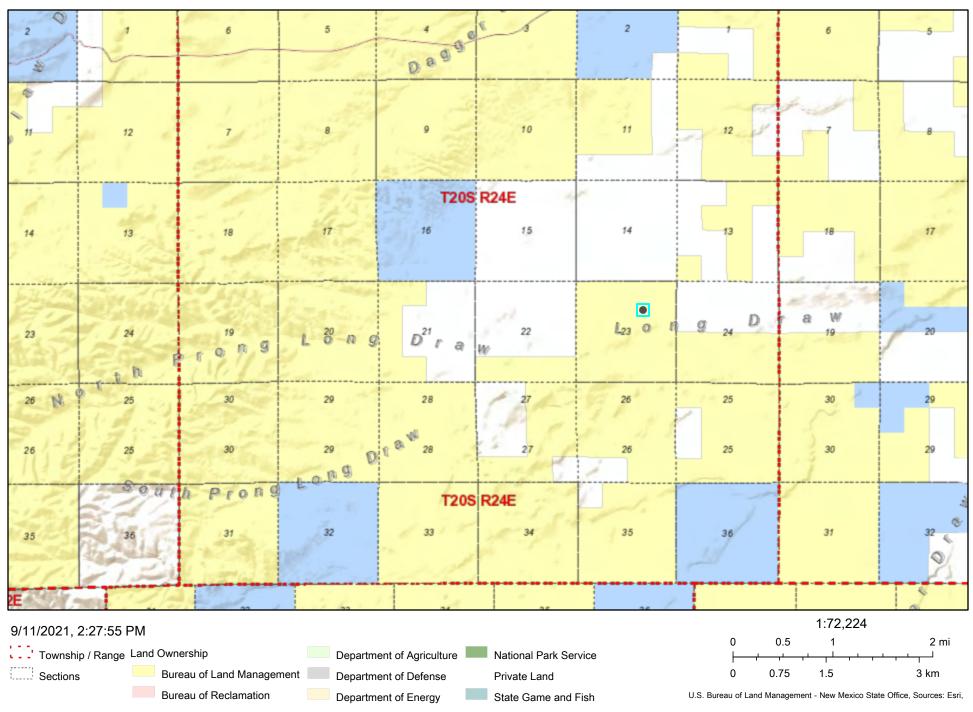
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National Wetlands Inventory (NWI) This page was produced by the NWI mapper

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EMNRD MMD GIS Coordinator

Active Mines in New Mexico



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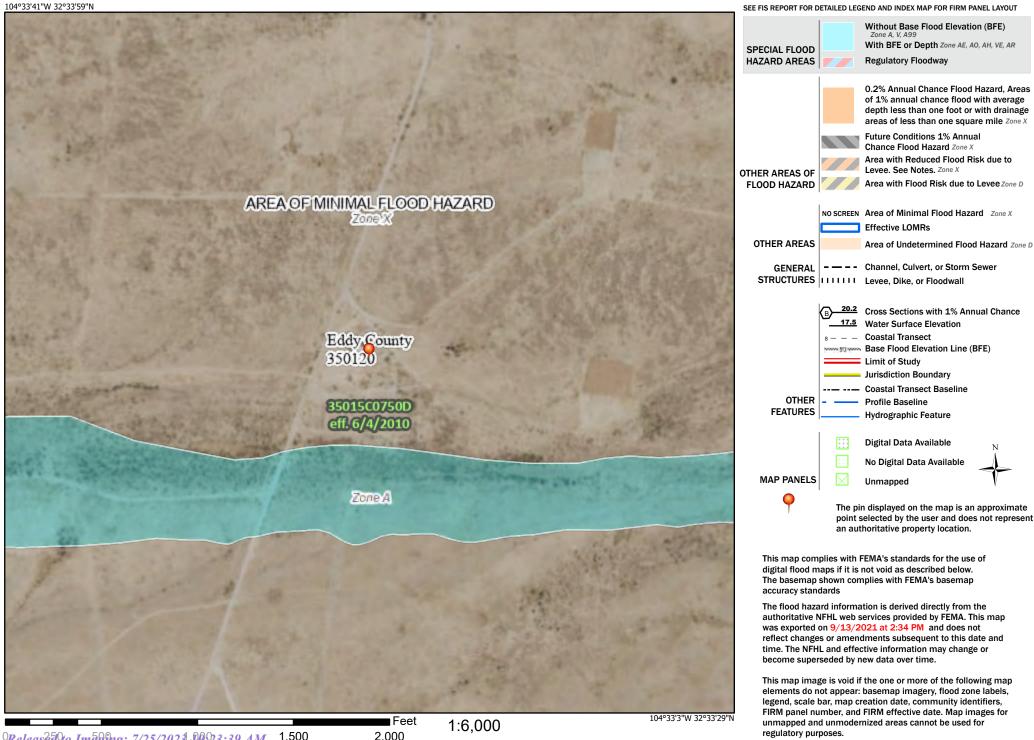
NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

Received by OCD: 7/19/2023 11:01:56 AM National Flood Hazard Layer FIRMette



Legend

Page 86 of 132



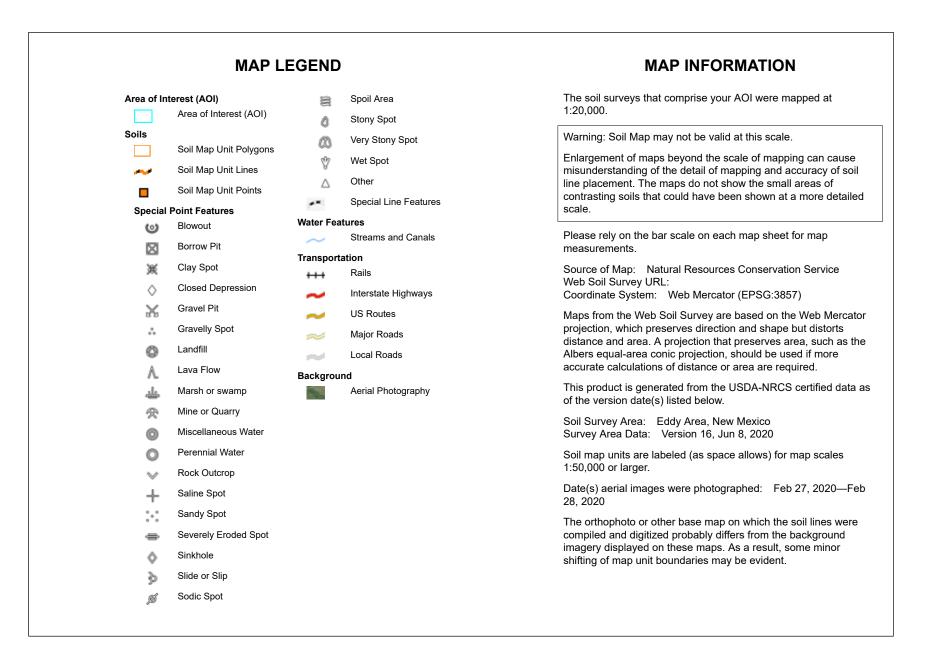
Release 4 to Imaging: 7/25/2023 90.23:39 AM 1,500

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



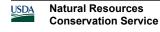
USDA Natural Resources Conservation Service Released to Imaging: 7/25/2023 10:23:39 AM

Web Soil Survey National Cooperative Soil Survey



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PM	Pima silt loam, 0 to 1 percent slopes	1.1	27.1%
RA	Reagan loam, 0 to 3 percent slopes	3.0	72.9%
Totals for Area of Interest		4.2	100.0%



Eddy Area, New Mexico

PM—Pima silt loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 1w56 Elevation: 600 to 4,200 feet Mean annual precipitation: 8 to 25 inches Mean annual air temperature: 60 to 70 degrees F Frost-free period: 195 to 290 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Pima and similar soils: 98 percent Minor components: 2 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pima

Setting

Landform: Alluvial fans, alluvial flats, flood plains Landform position (three-dimensional): Rise, talf Down-slope shape: Linear, convex Across-slope shape: Linear, convex Parent material: Alluvium

Typical profile

H1 - 0 to 3 inches: silt loam *H2 - 3 to 60 inches:* silty clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): 1 Land capability classification (nonirrigated): 7c Hydrologic Soil Group: C Ecological site: R042XC017NM - Bottomland Hydric soil rating: No

Minor Components

Dev

Percent of map unit: 1 percent *Ecological site:* R042XC017NM - Bottomland *Hydric soil rating:* No

Reagan

Percent of map unit: 1 percent *Ecological site:* R042XC007NM - Loamy *Hydric soil rating:* No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 16, Jun 8, 2020



Eddy Area, New Mexico

RA—Reagan loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5c Elevation: 1,100 to 4,400 feet Mean annual precipitation: 7 to 14 inches Mean annual air temperature: 60 to 70 degrees F Frost-free period: 200 to 240 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 98 percent Minor components: 2 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Alluvial fans, fan remnants Landform position (three-dimensional): Rise Down-slope shape: Linear, convex Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam *H2 - 8 to 60 inches:* loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water
 (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B *Ecological site:* R042XC007NM - Loamy *Hydric soil rating:* No

Minor Components

Upton

Percent of map unit: 1 percent Ecological site: R042XC025NM - Shallow Hydric soil rating: No

Atoka

Percent of map unit: 1 percent *Ecological site:* R042XC007NM - Loamy *Hydric soil rating:* No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 16, Jun 8, 2020



Functional / Structural Groups Worksheet

State	NM	Office	NN	MSO	_ Ecological Site	Bottomland R042	XC017NM
Observers	John Tunbe	rg,				Date	2/12/10
Fu	nctional / Structu	ural Group	S	Species List for Functional / Structural Groups			
Ν	ame	Potenti.1.	Actua.2			Names	-
Warm season v	ery tall bunchgrass	D		Big Sacat	ton		
warm season m	id height stolon gr	D		Tobosagr	ass		
warm season ta	ll bunchgrass	D		Alkali Sa	caton		
warm season lo	w stolon grass	D		Vine Mes	squite, Plains Bristleg	grass	
Warm season n	nid bunchgrass	S		Cane blue	estem, white tridens,	false rhodesgrass	
salt tolerant shi	rub	S		Fourwing	g saltbush		
deciduous shru	b legume	М		honey me	esquite		
drought toleran	t shrubs	М		Apache p	lume, american tarw	ort, littleleaf sumac	
Forbs		М		Coyote go	ourd, common sunfle	ower, pepperweed, gl	obemallov

Indicate whether each "structural/functional group" is a Dominant (D) (roughly 40-100% composition), a Subdominant (S) (roughly 11-40%) composition) a Minor Component (M) (3-11% composition), or a Trace Component (T) (<3% composition) based on weight or cover composition in the area of interest (e.g., "Actual" column) relative to the "Potential" column derived from information found in the ecological site/description and/or at the ecological reference area.

Biological Crust³ dominance is evaluated solely on **cover** not composition by weight.

Biological Crus?

Ecological Reference Worksheet

Author(s) / participant(s):	John Tunberg,				
Contact for lead author :	505-761-4488	Reference site used? Yes/No No			
Date: 2/12/2010 MI	LRA: 42.3 Ecological Site: Loamy	This <i>must</i> be verified based on soils			
and climate (see Ecological Site	e Description). Current plant community <u>ca</u>	nnot be used to identify the ecological site.			
Indicators: For each indicate	or, describe the potential for the site. Where	possible, (1) use numbers, (2) include expected			
range of values for above and b (3) site data. Continue descripti	· · ·	thin the reference state, when appropriate &			
1. Number and extent of rills	There should not be any rills.				
		ght or combinations of these disturbances rills may double in			
		understorms. Any rills formed should not be long lived or			
interconnected and should heal rap					
	erns: There can be evidence of sheet flow.				
There can be a few flow patterns that should be short and discontinuous. There can be some sheet flow. Water flow patterns should only be present following intense storm events on upper slope limits at the margins of this site. Numerous obstructions alter flow paths. Flow pattern length and numbers may double after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances.					
3. Number and height of erosi	onal pedestals or terracettes: Pedestals show	ald be rare. Terracettes can occure and should be discontinuous			
		be common and should be discontinuous. If present plant or			
-	an or herbivore impacts or extended drought or	destals are rare and only would be on the site following after combinations of these disturbances. These would show signs			
		er, lichen, moss, plant canopy are not bare ground) :			
5	of the ground cover on this site according to the				
5. Number of gullies and erosi	ion associated with gullies:				
		y, gullies if present will only follow the micro topography. nould not be any accelerated erosion. After high-intensity			
		npacts or extended drought or combinations of these			
		e of healing within 1 year of event and continuing after that.			
6. Extent of wind scoured, blo	• • • • • • • • • • • • • • • • • • •				
		ver there can be potential for depositional areas. Wind			
-	-	erosion would only be present following high-intensity			
		bacts or extended drought or combinations of these			
		d to reduce wind erosion. Deposition from off site sources			
can be common on this site and is	in fact a primary soil forming process. This site	e is succeptable to wind erosion when vegetation is removed			
or significantly decreased.					
	(describe size and distance expected to trave				
		mal. This site has adequate vegetation to stop litter			
		tter that has been transported onto the site from adjacent sites.			
· · · · ·	n the site and only travels short distances.	rages - most sites will show a range of values for both			
plant canopy and interspace		rages - most sites will show a range of values for both			
		e 1-2 in interspaces and 3-5 at bases of vegetation. This would I			
		tructure, and A-horizon color and thickness for both			
plant canopy and interspace					
The SOM content should be less the	han 1% A0 to 6 inches: gravish brown (10YI	R 5/2) loam, dark grayish brown (10YR 4/2) moist; weak fine			
		has weak thin to medium platy structure; common very fine			
		ghtly alkaline (pH 7.6); clear smooth boundary. (4 to 8 inches			
thick)					
-	composition (relative proportion of different	functional groups) & spatial distribution on infiltration			
& runoff:					
	-	es of grasses than in interspaces and around bases of shrubs.			
		either a petrocalcic, petrogypsic or gypsum horizon between			
		lay loam. Substratum textures are loam, silty clay loam, clay			
	and the available water holding capacity is high	elly loam, gravelly clay loam or very gravelly loam. to moderate.			

11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction):

There should not be any compaction layers on this site. There are soil profile features in the top 9 inches of the soil profile that would be mistaken for a management induced soil compaction layer. Management induced compaction layers will be more difficult to penetrate than clay lenses.

12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) :

black grama >> tobosa > C 4 bunch grasses (dropseeds) > C4 midgrasses (threeawns) >= soaptree yucca, ephedra, fourwing saltbush >= forbs (croton, desert marigold, globemallow, > broom snakeweed, prickly pear, = other forbs.

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) : Black grama and bunchgrasses can show decadence in centers of plants.

14. Average percent litter cover (_____%) and depth (_____inches).

Average 15% cover and 0.75 inch deep. (As per ESD)

15. Expected annual production (this is <u>TOTAL</u> above-ground production, not just forage production):

(Low Production 650 lbs./ac.) (Average RV Production 925 lbs./ac.) (High Production 1200 lbs./ac.) After wildfires, high herbivore impacts, extended drought, or combinations of these disturbances, can cause production to be significantly reduced (100-200 lbs per ac. the first growing season following a wildfire) and recover slowly under below average precipitation regimes.

16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do, continue to increase regardless of the management of the site and may eventually dominate

Tarbush, creosote and mesquite can be invaders to this site. Invasive plants should not occur in reference plant community. However, lovegrass, Russian thistle, kochia, and other nonnative annuals may initialy invade following extended disturbance. Mesquite and tarbush and creosote and lovegrass are the greatest threat to dominate this site in the long term after disturbance (primarily following wildfire exclusion but also includes high human or herbivore impacts and extended drought). Mesquite and tarbush and creosote and lovegrass are most likely to retain dominance if allowed to alter natural fire regime (this alteration may require poor land management combined with years of wet winterspring; dry summer-fall conditions). Any of these invaded communities represent a departure from the reference state.

17. Perennial plant reproductive capability :

Black grama reproduces by seed sporadically and reproduction by tiller and stolon can be common. The C4 midgrasses should have high reproductive potential and rapidly recover from drought in the absence of additional stresses (grazing).

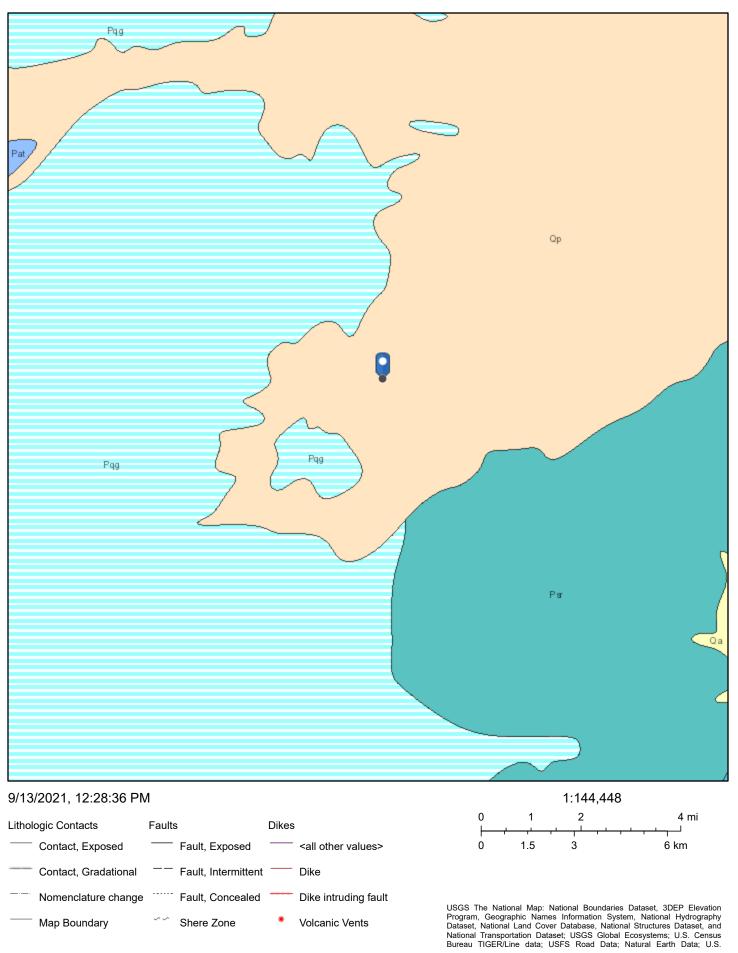
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Photograph (s)

MLRA :		Date :	
Ecological Site :			
Photo # 1			
Comments :			
Photo # 2			
Comments :			

Received by OCD: 7/19/2023 11:01:56 AM

Sawbuck Water Transfer Station



ArcGIS Web AppBuilder

APPENDIX C – Daily Field Report

Daily Site Visit Report



Client:	EOG Resources Inc.	Inspection Date:	6/5/2023	
Site Location Name:	Sawbuck Water Transfer	Report Run Date:	6/5/2023 5:27 PM	
Client Contact Name:	Chase Settle	API #:		
Client Contact Phone #:	575-703-6537			
Unique Project ID		Project Owner:		
Project Reference #		Project Manager:		
		Summary of	limes 🦷	
Arrived at Site	6/5/2023 9:30 AM			
Departed Site	6/5/2023 12:00 PM			
Field Notes				

11:23 Arrived on site and filled out safety paperwork.

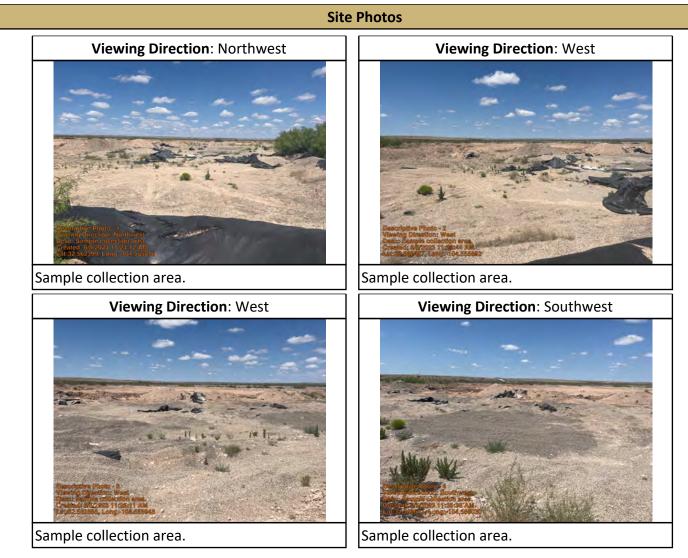
11:23 Collected and field screened samples BH23-03 through BH23-05 at 1'.

Next Steps & Recommendations

1

Daily Site Visit Report

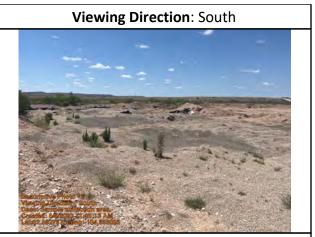




Run on 6/5/2023 5:27 PM UTC

Daily Site Visit Report





Sample collection area.

Run on 6/5/2023 5:27 PM UTC

V

VERTEX

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Hunter Klein

Signature:

Released to Imaging: 7/25/2023 10:23:39 AM

Run on 6/5/2023 5:27 PM UTC

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APPENDIX D – Notification

From:	Tina Huerta
To:	<u>ocd.enviro@emnrd.nm.gov;</u> <u>blm_nm_cfo_spill@blm.gov</u>
Cc:	Artesia S&E Spill Remediation; Artesia Regulatory
Subject:	Sawbuck Water Transfer (nJMW1317031601 (2RP-1685), nJMW1327753065 (2RP-1973), nKMW0800954755, nKMW0800954324, nMLB0608954436, nKMW0800954709) Sampling Notification
Date:	May 30, 2023 4:44:29 PM
Attachments:	image001.png

Good afternoon,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Sawbuck Water Transfer G-23-20S-24E Eddy County, NM nJMW1317031601 (2RP-1685), nJMW1327753065 (2RP-1973), nKMW0800954755, nKMW0800954324, nMLB0608954436, nKMW0800954709

Sampling will begin at 9:00 a.m. on Thursday, June 1, 2023, and continue through Wednesday, June 7, 2023.

Thank you,

Tina Huerta Regulatory Specialist Direct: 575.748.4168 Cell: 575.703.3121 Email: tina huerta@eogresources.com

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Artesia Division

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms



June 13, 2023

Chance Dixon Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040 FAX:

RE: Sawbuck Water Transfer

OrderNo.: 2306177

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/6/2023 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2306177-001

Sawbuck Water Transfer

Separate Incident - Past Closure Report Hall Environmental Analysis Laboratory, Inc.

Lab Order 2306177 Date Reported: 6/13/2023

Analytical Report

Client Sample ID: BH23-02 0' Collection Date: 6/2/2023 9:25:00 AM Received Date: 6/6/2023 8:35:00 AM

Analyses	Result				
		RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	6/7/2023 7:04:49 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/7/2023 7:04:49 PM
Surr: DNOP	92.8	69-147	%Rec	1	6/7/2023 7:04:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/10/2023 8:24:21 AM
Surr: BFB	97.7	15-244	%Rec	1	6/10/2023 8:24:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	6/10/2023 8:24:21 AM
Toluene	ND	0.048	mg/Kg	1	6/10/2023 8:24:21 AM
Ethylbenzene	ND	0.048	mg/Kg	1	6/10/2023 8:24:21 AM
Xylenes, Total	ND	0.095	mg/Kg	1	6/10/2023 8:24:21 AM
Surr: 4-Bromofluorobenzene	90.8	39.1-146	%Rec	1	6/10/2023 8:24:21 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	140	60	mg/Kg	20	6/8/2023 3:42:19 PM

Matrix: SOIL

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

н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 12

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CLIENT: Vertex Resources Services, Inc.

Sawbuck Water Transfer

Separate Incident - Past Closure Report Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2306177 Date Reported: 6/13/2023

Client Sample ID: BH23-02 1' Collection Date: 6/2/2023 9:30:00 AM Received Date: 6/6/2023 8:35:00 AM

Lab ID: 2306177-002	Matrix: SOIL	Received Date: 6/6/2023 8:35:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: PRD		
Diesel Range Organics (DRO)	16	9.8	mg/Kg	1	6/7/2023 7:15:49 PM		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/7/2023 7:15:49 PM		
Surr: DNOP	92.5	69-147	%Rec	1	6/7/2023 7:15:49 PM		
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: JJP		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/10/2023 9:34:42 AM		
Surr: BFB	99.7	15-244	%Rec	1	6/10/2023 9:34:42 AM		
EPA METHOD 8021B: VOLATILES					Analyst: JJP		
Benzene	ND	0.024	mg/Kg	1	6/10/2023 9:34:42 AM		
Toluene	ND	0.048	mg/Kg	1	6/10/2023 9:34:42 AM		
Ethylbenzene	ND	0.048	mg/Kg	1	6/10/2023 9:34:42 AM		
Xylenes, Total	ND	0.097	mg/Kg	1	6/10/2023 9:34:42 AM		
Surr: 4-Bromofluorobenzene	92.4	39.1-146	%Rec	1	6/10/2023 9:34:42 AM		
EPA METHOD 300.0: ANIONS					Analyst: JMT		
Chloride	ND	60	mg/Kg	20	6/8/2023 3:54:43 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 12

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2306177-003

Sawbuck Water Transfer

Separate Incident - Past Closure Report Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2306177 Date Reported: 6/13/2023

Client Sample ID: BH23-02 2'

Collection Date: 6/2/2023 9:35:00 AM Received Date: 6/6/2023 8:35:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: PRD
Diesel Range Organics (DRO)	10	9.4	mg/Kg	1	6/7/2023 7:37:41 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/7/2023 7:37:41 PM
Surr: DNOP	98.3	69-147	%Rec	1	6/7/2023 7:37:41 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/10/2023 10:45:13 AM
Surr: BFB	98.1	15-244	%Rec	1	6/10/2023 10:45:13 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	6/10/2023 10:45:13 AM
Toluene	ND	0.047	mg/Kg	1	6/10/2023 10:45:13 AM
Ethylbenzene	ND	0.047	mg/Kg	1	6/10/2023 10:45:13 AM
Xylenes, Total	ND	0.093	mg/Kg	1	6/10/2023 10:45:13 AM
Surr: 4-Bromofluorobenzene	92.4	39.1-146	%Rec	1	6/10/2023 10:45:13 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	6/8/2023 4:07:08 PM

Matrix: SOIL

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

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 3 of 12

CLIENT: Vertex Resources Services, Inc.

Sawbuck Water Transfer

Separate Incident - Past Closure Report Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2306177

Date Reported: 6/13/2023

Client Sample ID: BH23-02 3' Collection Date: 6/2/2023 9:40:00 AM **Dessived Deter** 6/6/2022 8:25:00 AM

Lab ID: 2306177-004	Matrix: SOIL	Received Date: 6/6/2023 8:35:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD		
Diesel Range Organics (DRO)	9.6	8.9	mg/Kg	1	6/7/2023 7:59:26 PM		
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	6/7/2023 7:59:26 PM		
Surr: DNOP	101	69-147	%Rec	1	6/7/2023 7:59:26 PM		
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst: JJP		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/10/2023 11:08:46 AM		
Surr: BFB	98.0	15-244	%Rec	1	6/10/2023 11:08:46 AM		
EPA METHOD 8021B: VOLATILES					Analyst: JJP		
Benzene	ND	0.024	mg/Kg	1	6/10/2023 11:08:46 AM		
Toluene	ND	0.049	mg/Kg	1	6/10/2023 11:08:46 AM		
Ethylbenzene	ND	0.049	mg/Kg	1	6/10/2023 11:08:46 AM		
Xylenes, Total	ND	0.097	mg/Kg	1	6/10/2023 11:08:46 AM		
Surr: 4-Bromofluorobenzene	91.2	39.1-146	%Rec	1	6/10/2023 11:08:46 AM		
EPA METHOD 300.0: ANIONS					Analyst: JMT		
Chloride	ND	60	mg/Kg	20	6/8/2023 4:19:32 PM		

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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 4 of 12

CLIENT: Vertex Resources Services, Inc.

Sawbuck Water Transfer

Separate Incident - Past Closure Report Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2306177

Date Reported: 6/13/2023

Client Sample ID: BH23-02 4' Collection Date: 6/2/2023 9:45:00 AM Dessived Deta: 6/6/2022 8:25:00 AM

Matrix: SOIL	Received Date: 6/6/2023 8:35:00 AM				
Result	RL Qu	al Units	DF	Date Analyzed	
L RANGE ORGANICS				Analyst: PRD	
13	9.7	mg/Kg	1	6/7/2023 8:21:10 PM	
ND	49	mg/Kg	1	6/7/2023 8:21:10 PM	
88.6	69-147	%Rec	1	6/7/2023 8:21:10 PM	
IE RANGE				Analyst: JJP	
ND	5.0	mg/Kg	1	6/10/2023 11:32:14 AM	
97.4	15-244	%Rec	1	6/10/2023 11:32:14 AM	
ES				Analyst: JJP	
ND	0.025	mg/Kg	1	6/10/2023 11:32:14 AM	
ND	0.050	mg/Kg	1	6/10/2023 11:32:14 AM	
ND	0.050	mg/Kg	1	6/10/2023 11:32:14 AM	
ND	0.099	mg/Kg	1	6/10/2023 11:32:14 AM	
91.3	39.1-146	%Rec	1	6/10/2023 11:32:14 AM	
				Analyst: JMT	
ND	60	mg/Kg	20	6/8/2023 4:31:57 PM	
	Result L RANGE ORGANICS 13 ND 88.6 IE RANGE ND 97.4 ES ND ND ND ND 91.3	Result RL Que L RANGE ORGANICS 13 9.7 ND 49 88.6 69-147 ND 5.0 97.4 15-244 ES ND 0.025 ND 0.050 ND 0.050 ND 0.050 ND 0.099 91.3 39.1-146	Result RL Qual Units 13 9.7 mg/Kg ND 49 mg/Kg 88.6 69-147 %Rec IE RANGE ND 5.0 mg/Kg 97.4 15-244 %Rec ES ND 0.025 mg/Kg ND 0.050 mg/Kg ND 0.099 mg/Kg 91.3 39.1-146 %Rec	Result RL Qual Units DF L RANGE ORGANICS 13 9.7 mg/Kg 1 ND 49 mg/Kg 1 88.6 69-147 %Rec 1 IE RANGE ND 5.0 mg/Kg 1 97.4 15-244 %Rec 1 97.4 15-244 %Rec 1 ES ND 0.025 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.099 mg/Kg 1 ND 0.099 mg/Kg 1 91.3 39.1-146 %Rec 1	

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

н

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit % Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 5 of 12

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2306177-006

Sawbuck Water Transfer

Analytical Report Lab Order 2306177

Date Reported: 6/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-03 0' Collection Date: 6/2/2023 9:50:00 AM Matrix: SOIL Received Date: 6/6/2023 8:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/7/2023 8:42:52 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/7/2023 8:42:52 PM
Surr: DNOP	89.8	69-147	%Rec	1	6/7/2023 8:42:52 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/10/2023 11:55:41 AM
Surr: BFB	98.3	15-244	%Rec	1	6/10/2023 11:55:41 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	6/10/2023 11:55:41 AM
Toluene	ND	0.048	mg/Kg	1	6/10/2023 11:55:41 AM
Ethylbenzene	ND	0.048	mg/Kg	1	6/10/2023 11:55:41 AM
Xylenes, Total	ND	0.097	mg/Kg	1	6/10/2023 11:55:41 AM
Surr: 4-Bromofluorobenzene	92.7	39.1-146	%Rec	1	6/10/2023 11:55:41 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	6/8/2023 5:09:11 PM

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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 12

Analytical Report Lab Order 2306177

Date Reported: 6/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-04 0 **Project:** Sawbuck Water Transfer Collection Date: 6/2/2023 9:55:00 AM Lab ID: 2306177-007 Matrix: SOIL Received Date: 6/6/2023 8:35:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.2 mg/Kg 1 6/7/2023 8:53:44 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 6/7/2023 8:53:44 PM Surr: DNOP 90.4 69-147 %Rec 1 6/7/2023 8:53:44 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.7 6/10/2023 12:19:11 PM mg/Kg 1 Surr: BFB 98.9 15-244 %Rec 1 6/10/2023 12:19:11 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 6/10/2023 12:19:11 PM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 6/10/2023 12:19:11 PM Ethylbenzene ND 0.047 mg/Kg 1 6/10/2023 12:19:11 PM Xylenes, Total ND 0.095 mg/Kg 6/10/2023 12:19:11 PM 1 Surr: 4-Bromofluorobenzene 93.4 39.1-146 %Rec 1 6/10/2023 12:19:11 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT mg/Kg Chloride 6/8/2023 5:21:36 PM ND 60 20

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

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

Page 7 of 12

CLIENT: Vertex Resources Services, Inc.

Sawbuck Water Transfer

Analytical Report Lab Order 2306177

Date Reported: 6/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-05 0' Collection Date: 6/2/2023 10:00:00 AM Received Date: 6/6/2023 8:35:00 AM

Lab ID: 2306177-008	Matrix: SOIL	Received Date: 6/6/2023 8:35:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: PRD		
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/7/2023 9:04:39 PM		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/7/2023 9:04:39 PM		
Surr: DNOP	91.6	69-147	%Rec	1	6/7/2023 9:04:39 PM		
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: JJP		
Gasoline Range Organics (GRO)	6.8	4.8	mg/Kg	1	6/10/2023 12:42:43 PM		
Surr: BFB	109	15-244	%Rec	1	6/10/2023 12:42:43 PM		
EPA METHOD 8021B: VOLATILES					Analyst: JJP		
Benzene	0.028	0.024	mg/Kg	1	6/10/2023 12:42:43 PM		
Toluene	0.17	0.048	mg/Kg	1	6/10/2023 12:42:43 PM		
Ethylbenzene	0.061	0.048	mg/Kg	1	6/10/2023 12:42:43 PM		
Xylenes, Total	0.46	0.096	mg/Kg	1	6/10/2023 12:42:43 PM		
Surr: 4-Bromofluorobenzene	95.3	39.1-146	%Rec	1	6/10/2023 12:42:43 PM		
EPA METHOD 300.0: ANIONS					Analyst: JMT		
Chloride	ND	60	mg/Kg	20	6/8/2023 5:34:01 PM		

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
- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL
 - Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 12

Client: Project:		ex Resources Se buck Water Trai		Inc.							
Sample ID:	MB-75461	-75461 SampType: mblk			TestCode: EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID: 75461			RunNo: 97318						
Prep Date:	6/8/2023	Analysis Da	ate: 6/8	8/2023	S	SeqNo: 35	535350	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-75461	SampTy	/pe: lcs		Tes	TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS	Batch	ID: 754	461	F	RunNo: 97	7318				
Prep Date:	6/8/2023	Analysis Da	ate: 6/ 3	8/2023	S	SeqNo: 3	535352	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.0	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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 12

2306177

13-Jun-23

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:		x Resources Service uck Water Transfer	s, Inc.							
Sample ID:	LCS-75370	SampType: L	.CS	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch ID: 7	5370	F	RunNo: 97	7270				
Prep Date:	6/6/2023	Analysis Date:	6/7/2023	ç	SeqNo: 35	533132	Units: %Rec			
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.4	5.000		108	69	147			
Sample ID:	LCS-75399	SampType: L	.CS	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch ID: 7	5399	F	RunNo: 97	7270				
Prep Date:	6/6/2023	Analysis Date:	6/7/2023	S	SeqNo: 35	533133	Units: %Rec			
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.3	5.000		86.4	69	147			
Sample ID:	LCS-75406	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID:	LCSS	Batch ID: 7	RunNo: 97270							
Prep Date:	6/7/2023	Analysis Date:	6/7/2023	S	SeqNo: 3	533134	Units: mg/Kg	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	48 10	50.00	0	95.2	61.9	130			
Surr: DNOP		4.7	5.000		93.1	69	147			
Sample ID:	MB-75370	SampType: N	IBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	PBS	Batch ID: 7	5370	F	RunNo: 97	7270				
Prep Date:	6/6/2023	Analysis Date:	6/7/2023	S	SeqNo: 3	533136	Units: %Rec			
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		11	10.00		109	69	147			
Sample ID:	MB-75399	SampType: N	IBLK	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	PBS	Batch ID: 7	5399	F	RunNo: 97	7270				
Prep Date:	6/6/2023	Analysis Date:	6/7/2023	S	SeqNo: 35	533137	Units: %Rec			
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.6	10.00		96.3	69	147			
Sample ID:	MB-75406	SampType: N	IBLK	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
	PBS	Batch ID: 7			RunNo: 97		_ `	J *	-	
Prep Date:		Analysis Date:			SeqNo: 35		Units: mg/Kg	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	- %RPD	RPDLimit	Qual
	Organics (DRO)	ND 10			-		5			

Ana Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated. S

ND

9.5

50

10.00

в Analyte detected in the associated Method Blank

95.3

147

69

- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit 2306177

13-Jun-23

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

2306177	WO#:
13-Jun-23	

Page 118 of 132

Client: Project:	Vertex Re Sawbuck		,	Inc.							
Sample ID:	lcs-75393	SampT	Гуре: LC	S	Tes	TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID: 75393			F	RunNo: 97323					
Prep Date:	6/6/2023	Analysis [Date: 6/	10/2023	S	SeqNo: 3	537032	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	5.0	25.00	0	88.4	70	130			
Surr: BFB		1900		1000		192	15	244			
Sample ID:	mb-75393	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	line Range	•	
Client ID:	PBS	Batcl	h ID: 753	393	F	RunNo: 97	7323				
Prep Date:	6/6/2023	Analysis E	Date: 6/*	10/2023	S	SeqNo: 3	537034	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		000		1000		95.8	4 -	044			
SUII. DFD		960		1000		95.6	15	244			
	2306177-001ams		Гуре: МS		Tes		-	244 8015D: Gasol	line Range		
	2306177-001ams BH23-02 0'	SampT	Гуре: МS h ID: 75 3	6			PA Method		line Range		
Sample ID:		SampT	h ID: 753	393	F	tCode: EF	PA Method 7323		-		
Sample ID: Client ID:	BH23-02 0'	Samp1 Batcl	h ID: 753	393 10/2023	F	tCode: EF RunNo: 97 SeqNo: 38	PA Method 7323	8015D: Gasol	-	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte	BH23-02 0'	Samp Batcl Analysis [h ID: 75: Date: 6/	393 10/2023	F	tCode: EF RunNo: 97 SeqNo: 38	PA Method 7323 537047	8015D: Gasol Units: mg/K	g		Qual
Sample ID: Client ID: Prep Date: Analyte	BH23-02 0' 6/6/2023	SampT Batcl Analysis I Result	h ID: 75: Date: 6/ PQL	393 10/2023 SPK value	F S SPK Ref Val	tCode: EF RunNo: 97 SeqNo: 38 %REC	PA Method 7323 537047 LowLimit	8015D: Gaso l Units: mg/K HighLimit	g		Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	BH23-02 0' 6/6/2023	SampT Batcl Analysis I Result 22 1900	h ID: 75: Date: 6/ PQL	393 10/2023 SPK value 23.95 957.9	F S SPK Ref Val 0	tCode: EF RunNo: 97 SeqNo: 38 %REC 93.2 201	PA Method 7323 537047 LowLimit 70 15	8015D: Gasol Units: mg/K HighLimit 130	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	BH23-02 0' 6/6/2023 Je Organics (GRO)	SampT Batcl Analysis I Result 22 1900 SampT	h ID: 75: Date: 6/ PQL 4.8	5 393 10/2023 SPK value 23.95 957.9	F SPK Ref Val 0 Tes	tCode: EF RunNo: 97 SeqNo: 38 %REC 93.2 201	PA Method 7323 537047 LowLimit 70 15 PA Method	8015D: Gasol Units: mg/K HighLimit 130 244	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID:	BH23-02 0' 6/6/2023 e Organics (GRO) 2306177-001amsd	SampT Batcl Analysis I Result 22 1900 SampT	h ID: 753 Date: 6 / PQL 4.8 Type: MS h ID: 753	393 10/2023 SPK value 23.95 957.9 5D 393	F SPK Ref Val 0 Tes F	tCode: EF RunNo: 97 SeqNo: 38 %REC 93.2 201 tCode: EF	PA Method 7323 537047 LowLimit 70 15 PA Method 7323	8015D: Gasol Units: mg/K HighLimit 130 244	g %RPD ine Range	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID: Client ID:	BH23-02 0' 6/6/2023 ge Organics (GRO) 2306177-001amsd BH23-02 0'	SampT Batcl Analysis I Result 22 1900 SampT Batcl	h ID: 753 Date: 6 / PQL 4.8 Type: MS h ID: 753	393 10/2023 SPK value 23.95 957.9 5D 393 10/2023	F SPK Ref Val 0 Tes F	tCode: EF RunNo: 97 SeqNo: 38 %REC 93.2 201 tCode: EF RunNo: 97	PA Method 7323 537047 LowLimit 70 15 PA Method 7323	8015D: Gasol Units: mg/K HighLimit 130 244 8015D: Gasol	g %RPD ine Range	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID: Client ID: Prep Date: Analyte	BH23-02 0' 6/6/2023 ge Organics (GRO) 2306177-001amsd BH23-02 0'	Samp Batcl Analysis I Result 22 1900 Samp Batcl Analysis I	A ID: 75 Date: 6 / PQL 4.8 Type: MS h ID: 75 Date: 6 /	393 10/2023 SPK value 23.95 957.9 5D 393 10/2023	F SPK Ref Val 0 Tes F	tCode: EF RunNo: 97 SeqNo: 38 %REC 93.2 201 tCode: EF RunNo: 97 SeqNo: 38	PA Method 7323 537047 LowLimit 70 15 PA Method 7323 537048	8015D: Gasol Units: mg/K HighLimit 130 244 8015D: Gasol Units: mg/K	g %RPD line Range	RPDLimit	

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 12

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Vertex Re Sawbuck			Inc.							
Sample ID:	LCS-75393	Samp	Type: LC	S	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batc	h ID: 75	393	F	RunNo: 9 7					
Prep Date:	6/6/2023	Analysis [Date: 6/	10/2023	S	SeqNo: 3	537094	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.91	0.025	1.000	0	91.1	70	130			
Toluene		0.90	0.050	1.000	0	90.5	70	130			
Ethylbenzene		0.89	0.050	1.000	0	88.8	70	130			
Xylenes, Total		2.7	0.10	3.000	0	90.0	70	130			
Surr: 4-Brom	ofluorobenzene	0.94		1.000		94.1	39.1	146			
Sample ID:	mb-75393	SampType: MBLK			Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch ID: 75393			F	RunNo: 9 7	7323				
Prep Date:	6/6/2023	Analysis Date: 6/10/2023			S	SeqNo: 3	537096	Units: mg/k	٢g		
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-Brom	ofluorobenzene	0.90		1.000		89.7	39.1	146			
Sample ID:	2306177-002ams	Samp	Туре: МS	;	TestCode: EPA Method 8021B: Volatiles						
Client ID:	BH23-02 1'	Batc	h ID: 75 :	393	F	RunNo: 9 7	7323				
Prep Date:	6/6/2023	Analysis I	Date: 6/	10/2023	S	SeqNo: 3	537107	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.88	0.024	0.9709	0	90.7	70	130			
Toluene		0.88	0.049	0.9709	0	90.9	70	130			
Ethylbenzene		0.89	0.049	0.9709	0	91.4	70	130			
Xylenes, Total		2.7	0.097	2.913	0	91.6	70	130			
Surr: 4-Brom	ofluorobenzene	0.92		0.9709		94.8	39.1	146			
Sample ID:	2306177-002amsd	Samp	Туре: МS	D	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	BH23-02 1'	Batc	h ID: 75 :	393	F	RunNo: 9 7	7323				
Prep Date:					c	SeqNo: 3	537108	Units: mg/k	(a		
T TOP Date.	6/6/2023	Analysis I	Date: 6/	10/2023	c c		57 100	e night	5		
Analyte	6/6/2023	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Benzene	6/6/2023	Result 0.88	PQL 0.024	SPK value 0.9737	SPK Ref Val 0	%REC 90.5	LowLimit 70	HighLimit 130	%RPD 0.137	20	Qual
Analyte Benzene Toluene	6/6/2023	Result 0.88 0.89	PQL 0.024 0.049	SPK value 0.9737 0.9737	SPK Ref Val 0 0	%REC 90.5 91.8	LowLimit 70 70	HighLimit 130 130	%RPD 0.137 1.28	20 20	Qual
Analyte Benzene Toluene Ethylbenzene	6/6/2023	Result 0.88 0.89 0.89	PQL 0.024 0.049 0.049	SPK value 0.9737 0.9737 0.9737	SPK Ref Val 0 0 0	%REC 90.5 91.8 91.1	LowLimit 70 70 70	HighLimit 130 130 130	%RPD 0.137 1.28 0.103	20 20 20	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total	6/6/2023	Result 0.88 0.89	PQL 0.024 0.049	SPK value 0.9737 0.9737	SPK Ref Val 0 0	%REC 90.5 91.8	LowLimit 70 70	HighLimit 130 130	%RPD 0.137 1.28	20 20	Qual

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#:	2306177

13-Jun-23

HALL ENVIRONMENTAL ANALYSIS LABORATORY			TE	Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com					Sample Log-In Check List				
Client Name:	Vertex Res Services, Ir		Work	Order Numb	ber: 230	6177			RcptNo: 1				
Received By:	Joseph Al	derette	6/6/202	3 8:35:00 AI	м		J.F	(
Completed By:	Tracy Cas		6/6/202	3 8:48:47 Al	М								
Reviewed By:	JA 6-	6-23											
0													
Chain of Cust	ody												
1. Is Chain of Cu	stody comp	lete?			Yes		N	o 🗸	Not Present				
2. How was the s	ample deliv	ered?			Cou	rier							
Log In 3. Was an attemp	ot made to c	ool the sampl	les?		Yes		N	•					
4. Were all sampl	es received	at a temperal	ture of >0° C	to 6.0°C	Yes		N	•	NA 🗌				
5. Sample(s) in p	roper contai	ner(s)?			Yes		N	o 🗌					
6. Sufficient samp	ole volume fo	or indicated te	est(s)?		Yes		No	b					
7. Are samples (e	xcept VOA	and ONG) pro	perly preserve	ed?	Yes		No	b					
8. Was preservati	ve added to	bottles?			Yes		No		NA 🗌				
9. Received at lea	ist 1 vial witl	h headspace ·	<1/4" for AQ \	/OA?	Yes		No						
10. Were any sam					Yes		N	• 🔽					
11. Does paperwor					Yes		No	• 🗆	# of preserved bottles checked for pH: (<2 or >12 upless no	tod)			
(Note discrepai 2. Are matrices co					Yes		No		Adjusted?	ieu)			
3. Is it clear what			-				No	_					
14. Were all holdin (If no, notify cu	g times able	to be met?			Yes			• 🗆	checked by: JN6/6	6/23			
Special Handli	ng (if app	licable)											
15. Was client not			vith this order	?	Yes		N	•	NA 🗹				
Person N	lotified:			Date:				-					
By Whor	n:			Via:	eMa	ail 🗌	Phone [] Fax	In Person				
Regardir	ig: 📕				NA TO BE DOLD		A setter of the fact in the set						
Client Ins	structions:	Mailing addre	ss, phone nur	mber and Em	ail are m	issing	on COC-	TMC 6	/6/23				
16. Additional rem	narks:												
17. <u>Cooler Inforn</u>	nation												
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Da	ate	Signed	i By					
1	5.8	Good	Yes	Morty									

Released to Imaging: 7/25/2023 10:23:39 AM

Page 120 of 132

ound Time dard Name: Aland Name: Aland Aland <	Turn-Around Time: 日 Standard Z Rush ら Quy Project Name: SQL & し こん & ム な たど Project #: Project #: Tel. 505-345-3975	LO O a D a L	eparate I	Incident - Past Clo	yd by:
	dy Record	Camplance (Full Validation)	8423-02 0' 8423-02 1'		r 1000
Or E:16 Or E:16 Intready Record At Compliance At Compliance Other At Compliance Other At Compliance At Compliance At Compliance At Compliance At Compliance Other BH23-02 At 23-02 At 23-03	Client: たのらい Mailing Address:	Phone #: amail or Fax#: avac Package: Standard Accreditation: (NELAC DEDD (Type)	02:02	0:07 0:45 0:55 0:55 0:50	Date: Time: SING 10 15 Bate Time:

Released to Imaging: 7/25/2023 10:23:39 AM

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June 19, 2023

Chance Dixon EOG 105 South Fourth Street Artesia, NM 88210 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Sawbuck

OrderNo.: 2306399

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/8/2023 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,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2306399

Date Reported: 6/19/2023

6/14/2023 12:15:00 AM 75478

6/14/2023 12:15:00 AM 75478

6/14/2023 12:15:00 AM 75478

CLIENT: EOG Project: Sawbuck	Client Sample ID: BH23-03 1' Collection Date: 6/5/2023 10:00:00 AM								
Lab ID: 2306399-001	Matrix: SOIL		Received Dat	e: 6/8	8/2023 7:35:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	: SNS			
Chloride	ND	60	mg/Kg	20	6/14/2023 7:15:44 PM	75594			
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: DGH			
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/10/2023 12:37:14 AM	75498			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/10/2023 12:37:14 AM	75498			
Surr: DNOP	98.4	69-147	%Rec	1	6/10/2023 12:37:14 AM	75498			
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: KMN			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/14/2023 12:15:00 AM	75478			
Surr: BFB	95.4	15-244	%Rec	1	6/14/2023 12:15:00 AM	75478			
EPA METHOD 8021B: VOLATILES					Analyst	t: KMN			
Benzene	ND	0.025	mg/Kg	1	6/14/2023 12:15:00 AM	75478			
Toluene	ND	0.050	mg/Kg	1	6/14/2023 12:15:00 AM	75478			

ND

ND

90.8

0.050

0.10

39.1-146

mg/Kg

mg/Kg

%Rec

1

1

1

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

Qualifiers:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р Reporting Limit
- RL

Page 1 of 7

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2306399

Date Reported: 6/19/2023

6/14/2023 12:37:00 AM 75478

6/14/2023 12:37:00 AM 75478

CLIENT: EOG Project: Sawbuck Lab ID: 2306399-002	Matrix: SOIL	Client Sample ID: BH23-04 1' Collection Date: 6/5/2023 10:05:00 AM Matrix: SOIL Received Date: 6/8/2023 7:35:00 AM								
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analyst	: SNS				
Chloride	ND	61	mg/Kg	20	6/14/2023 7:52:47 PM	75594				
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst	: DGH				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/10/2023 12:48:09 AM	75498				
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/10/2023 12:48:09 AM	75498				
Surr: DNOP	85.9	69-147	%Rec	1	6/10/2023 12:48:09 AM	75498				
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: KMN				
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/14/2023 12:37:00 AM	75478				
Surr: BFB	94.7	15-244	%Rec	1	6/14/2023 12:37:00 AM	75478				
EPA METHOD 8021B: VOLATILES					Analyst	: KMN				
Benzene	ND	0.024	mg/Kg	1	6/14/2023 12:37:00 AM	75478				
Toluene	ND	0.048	mg/Kg	1	6/14/2023 12:37:00 AM	75478				
Ethylbenzene	ND	0.048	mg/Kg	1	6/14/2023 12:37:00 AM	75478				

ND

92.0

0.097

39.1-146

mg/Kg 1

%Rec 1

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

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 7

Analytical Report

Lab Order 2306399

Date Reported: 6/19/2023

6/14/2023 12:58:00 AM 75478

6/14/2023 12:58:00 AM 75478

6/14/2023 12:58:00 AM 75478

CLIENT:			Client Sample ID: BH23-05 1'									
Project: Lab ID:	Sawbuck 2306399-003	Matrix: SOIL	Collection Date: 6/5/2023 10:10:00 AM Matrix: SOIL Received Date: 6/8/2023 7:35:00 AM									
Analyses		Result	RL Q	ual Units	DF	Date Analyzed	Batch					
ΕΡΑ ΜΕΤ	HOD 300.0: ANIONS					Analyst	SNS					
Chloride		ND	60	mg/Kg	20	6/14/2023 8:05:08 PM	75594					
ЕРА МЕТ	HOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst	DGH					
Diesel Ra	ange Organics (DRO)	ND	9.2	mg/Kg	1	6/10/2023 12:59:03 AM	75498					
Motor Oil	Range Organics (MRO)	ND	46	mg/Kg	1	6/10/2023 12:59:03 AM	75498					
Surr: D	NOP	90.4	69-147	%Rec	1	6/10/2023 12:59:03 AM	75498					
ΕΡΑ ΜΕΤ	HOD 8015D: GASOLINE RA	NGE				Analyst	: KMN					
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	6/14/2023 12:58:00 AM	75478					
Surr: E	FB	100	15-244	%Rec	1	6/14/2023 12:58:00 AM	75478					
ΕΡΑ ΜΕΤ	HOD 8021B: VOLATILES					Analyst	: KMN					
Benzene		ND	0.024	mg/Kg	1	6/14/2023 12:58:00 AM	75478					
Toluene		ND	0.048	mg/Kg	1	6/14/2023 12:58:00 AM	75478					

ND

ND

93.7

0.048

0.096

39.1-146

mg/Kg

mg/Kg

%Rec

1

1

1

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

Qualifiers:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 7

	WO#:	2306399
all Environmental Analysis Laboratory, Inc.		19-Jun-23

Client: Project:	EOG Sawbuck										
Sample ID:	MB-75594	SampT	уре: МЕ	BLK	Tes	stCode: EF	PA Method	300.0: Anions	6		
Client ID:	PBS	Batch	ID: 75	594	F	RunNo: 9 7	7431				
Prep Date:	6/14/2023	Analysis D	ate: 6/	14/2023	Ş	SeqNo: 3	541454	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-75594	SampT	ype: LC	S	Tes	stCode: EF	PA Method	300.0: Anions	6		
Client ID:	LCSS	Batch	D: 75	594	F	RunNo: 97	7431				
Prep Date:	6/14/2023	Analysis D	ate: 6/	14/2023	Ş	SeqNo: 3	541455	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.1	90	110			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 7

2306399 19-Jun-23

WO#:

EOG Sawbuck										
S-75498	SampT	ype: LC	S	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics	
SS	Batch	n ID: 754	498	F	RunNo: 97	343				
/9/2023	Analysis D	Date: 6/	9/2023	S	SeqNo: 35	36614	Units: mg/K	g		
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
nics (DRO)	35	10	50.00	0	70.8	61.9	130			
	5.0		5.000		99.4	69	147			
3-75498	SampT	уре: МЕ	BLK	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics	
S	Batch	n ID: 754	498	F	RunNo: 97	'343				
/9/2023	Analysis D	Date: 6/	9/2023	5	SeqNo: 35	36619	Units: mg/K	g		
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
nics (DRO)	ND	10								
rganics (MRO)	ND	50								
	9.7		10.00		97.3	69	147			
	Sawbuck S-75498 SS /9/2023 nics (DRO) 3-75498 S /9/2023 nics (DRO)	Sawbuck S-75498 SampT SS Batch /9/2023 Analysis D Result nics (DRO) 35 5.0 3-75498 SampT S Batch /9/2023 Analysis D Result nics (DRO) ND rganics (MRO) ND	Sawbuck S-75498 SampType: LC SS Batch ID: 754 /9/2023 Analysis Date: 6// Result PQL nics (DRO) 35 10 5.0 5.0 5.0 3-75498 SampType: ME S Batch ID: 754 /9/2023 Analysis Date: 6// Result PQL 754 /9/2023 Analysis Date: 6// Inics (DRO) ND 10 rganics (MRO) ND 50	Sawbuck Ss75498 SampType: LCS SS Batch ID: 75498 V9/2023 Analysis Date: 6/9/2023 Result PQL SPK value nics (DRO) 35 10 50.00 3-75498 SampType: MBLK S Batch ID: 75498 /9/2023 Analysis Date: 6/9/2023 Result PQL SPK value nics (DRO) ND 10 rganics (MRO) ND 50	Sawbuck Ss-75498 SampType: LCS Tes SS Batch ID: 75498 F Y9/2023 Analysis Date: 6/9/2023 S Result PQL SPK value SPK Ref Val nics (DRO) 35 10 50.00 0 3-75498 SampType: MBLK Tes S Batch ID: 75498 F /9/2023 Analysis Date: 6/9/2023 S Result PQL SPK value SPK Ref Val nics (DRO) Analysis Date: 6/9/2023 S Result PQL SPK value SPK Ref Val nics (DRO) ND 10 T rganics (MRO) ND 50 S	Sawbuck Ss.75498 SampType: LCS TestCode: EF SS Batch ID: 75498 RunNo: 97 Y9/2023 Analysis Date: 6/9/2023 SeqNo: 35 Result PQL SPK value SPK Ref Val %REC nics (DR0) 35 10 50.00 99.4 3-75498 SampType: MBLK TestCode: EF IS Batch ID: 75498 RunNo: 97 /9/2023 Analysis Date: 6/9/2023 SeqNo: 35 Result PQL SPK value SPK Ref Val %REC //s Batch ID: 75498 RunNo: 97 //g/2023 Analysis Date: 6/9/2023 SeqNo: 35 Result PQL SPK value SPK Ref Val %REC nics (DR0) ND 10 mics (MR0) ND 50	Sawbuck S-75498 SampType: LCs TestCode: EPA Method SS Batch ID: 75498 RunNo: 97343 /9/2023 Analysis Date: 6/9/2023 SeqNo: 3536614 Result PQL SPK value SPK Ref Val %REC LowLimit nics (DRO) 35 10 50.00 0 70.8 61.9 5.0 5.000 99.4 69 3-75498 SampType: MBLK TestCode: EPA Method S Batch ID: 75498 RunNo: 97343 /9/2023 Analysis Date: 6/9/2023 SeqNo: 3536619 Result PQL SPK value SPK Ref Val %REC LowLimit nics (DRO) ND 10 SeqNo: 3536619 Result PQL SPK value SPK Ref Val %REC LowLimit nics (DRO) ND 10 SeqNo: 3536619	Sawbuck TestCode: EPA Method 8015M/D: Die SS Batch ID: 75498 RunNo: 97343 Y9/2023 Analysis Date: 6/9/2023 SeqNo: 3536614 Units: mg/K Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit nics (DRO) 35 10 50.00 0 70.8 61.9 130 3-75498 SampType: MBLK TestCode: EPA Method 8015M/D: Die S Batch ID: 75498 RunNo: 97343 Y9/2023 Analysis Date: 6/9/2023 SeqNo: 3536619 Units: mg/K Y9/2023 Analysis Date: 6/9/2023 SeqNo: 3536619 Units: mg/K Y9/2023 Analysis Date: 6/9/2023 SeqNo: 3536619 Units: mg/K Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit nics (DRO) ND 10 SeqNO	Sawbuck SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range SS Batch ID: 75498 RunNo: 97343 Units: mg/Kg /9/2023 Analysis Date: 6/9/2023 SeqNo: 3536614 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD nics (DRO) 35 10 50.00 0 70.8 61.9 130 3-75498 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range IS Batch ID: 75498 RunNo: 97343	Sawbuck SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics SS Batch ID: 75498 RunNo: 97343

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 7

PK I	WO#:	2306399
is Laboratory, Inc.		19-Jun-23

Client: Project:	EOG Sawbuck											
Sample ID: Ic	cs-75478	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range							
Client ID: L	CSS	Batch	ID: 754	478	F	RunNo: 9 7	7367					
Prep Date:	6/8/2023	Analysis D	ate: 6/	12/2023	S	SeqNo: 3	538457	Units: mg/K	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range (Organics (GRO)	24	5.0	25.00	0	97.4	70	130				
Surr: BFB		2200		1000		220	15	244				
Sample ID: n	nb-75478	SampT	ype: ME	BLK	TestCode: EPA Method 8015D: Gasoline Range							
Client ID: P	BS	Batch	ID: 754	478	RunNo: 97367							
Prep Date:	6/8/2023	Analysis D	ate: 6/	12/2023	S	SeqNo: 3538458		Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range (Organics (GRO)	ND	5.0									
Surr: BFB		1000		1000		105	15	244				

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 7

Released to Imaging: 7/25/2023 10:23:39 AM

EOG

Sawbuck

Client:

Project:

Sample ID: Ics-75478

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

Client ID: LCSS	Batcl	h ID: 75 4	178	F	RunNo: 9 7	7367				
Prep Date: 6/8/2023	Analysis [Date: 6/*	12/2023	S	SeqNo: 3	538472	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.9	70	130			
Toluene	0.93	0.050	1.000	0	92.9	70	130			
Ethylbenzene	0.92	0.050	1.000	0	92.4	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.3	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	39.1	146			
Sample ID: mb-75478	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Sample ID: mb-75478 Client ID: PBS	•	Гуре: МЕ h ID: 75 4			tCode: EF RunNo: 97		8021B: Volati	les		
	•	h ID: 754	178	F		7367	8021B: Volati Units: mg/K			
Client ID: PBS	Batcl	h ID: 754	178 12/2023	F	RunNo: 9 7	7367			RPDLimit	Qual
Client ID: PBS Prep Date: 6/8/2023	Batcl Analysis [h ID: 75 4 Date: 6 /*	178 12/2023	F	RunNo: 97 SeqNo: 3	7367 538473	Units: mg/K	g	RPDLimit	Qual
Client ID: PBS Prep Date: 6/8/2023 Analyte	Batcl Analysis I Result	h ID: 75 4 Date: 6 /* PQL	178 12/2023	F	RunNo: 97 SeqNo: 3	7367 538473	Units: mg/K	g	RPDLimit	Qual
Client ID: PBS Prep Date: 6/8/2023 Analyte Benzene	Batcl Analysis I Result ND	h ID: 75 4 Date: 6/ PQL 0.025	178 12/2023	F	RunNo: 97 SeqNo: 3	7367 538473	Units: mg/K	g	RPDLimit	Qual
Client ID: PBS Prep Date: 6/8/2023 Analyte Benzene Toluene	Batcl Analysis I Result ND ND	h ID: 75 4 Date: 6 / PQL 0.025 0.050	178 12/2023	F	RunNo: 97 SeqNo: 3	7367 538473	Units: mg/K	g	RPDLimit	Qual

TestCode: EPA Method 8021B: Volatiles

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- в Analyte detected in the associated Method Blank
- Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit
- Above Quantitation Range/Estimated Value

WO#:	2306399	

19-Jun-23

HALL ENVIRONMENT ANALYSIS LABORATORY	AL	TEL: 505-345-3	ntal Analysis Labora 4901 Hawkin: Albuquerque, NM 87 975 FAX: 505-345-4 v.hallenvironmental.	s NE 7109 San 1107	nple Log-In Ch	neck List
Client Name: EOG		Work Order Num	ber: 2306399		RcptNo:	1
Received By: Tracy Ca	sarrubias	6/8/2023 7:35:00 A	м			
Completed By: Tracy Ca	sarrubias	6/8/2023 8:50:48 A	м			
Reviewed By: JH 6	18/23					
Chain of Custody						
1. Is Chain of Custody com	plete?		Yes 🗌	No 🗹	Not Present	
2. How was the sample deli	vered?		Courier			
Log In 3. Was an attempt made to	cool the sample	s?	Yes 🗹	No 🗌	NA 🗍	
4. Were all samples received	d at a temperatu	re of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗌	
5. Sample(s) in proper conta	ainer(s)?		Yes 🗹	No 🗔		
6. Sufficient sample volume	for indicated test	i(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA	and ONG) prop	erly preserved?	Yes 🖌	No 🗌		
8. Was preservative added to	o bottles?		Yes	No 🗹	NA 🗌	,
9. Received at least 1 vial wi	ith headspace <1	/4" for AQ VOA?	Yes	No 🗌	NA 🗹	160 m
10. Were any sample contain	•		Yes	No 🔽		Pullic
11. Does paperwork match bo			Yes 🗹	No 🗌	# of preserved bottles checked for pH:	106/02/7
(Note discrepancies on ch					<2 or/> Adjusted?	12 unless noted)
12. Are matrices correctly iden		of Custody?	Yes 🗹		Adjusted?	
13. Is it clear what analyses w 14. Were all holding times abl			Yes 🗹 Yes 🗹	No 🗌 No 🗍	Checked by:	
(If no, notify customer for						
Special Handling (if ap	plicable)				(
15. Was client notified of all o	liscrepancies wit	h this order?	Yes 🗌	No 🗌		
Person Notified:		Date	[
By Whom:		Via:	eMail P	hone 🗌 Fax	In Person	
Regarding:	[to an internet in the set of	
Client Instructions:	Mailing address	s, phone number,and Er	nail are missing on	COC- T MC 6	6/8/23	
16. Additional remarks:						
17. <u>Cooler Information</u> Cooler No Temp °C		Seal Intact Seal No	Seal Date	Signed By		
1 3.3	Good Y	'es Yogi				

Page 130 of 132

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	ANALYSIS LABORATORY	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	505-345-3975	Anal	¢Os	SMIS0	(1.40) or 827 , NO ₂ , ,	-VO 103 103 103 103	lethc 3 Me 3 Me 3 M 3 M 3 M 4 3 M 5 3 M 5 3 M 5 1 0 4 3 M 5 1 3 M 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8081 Pd EDB (M PAHs b 8260 (V 8270 (S Total Cd							Remarks: send evail to colixon@vertex.cg d	analytical@vertex.ca	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
		490	Tel.							NX3T8	-	XX	X X				Remarks:	anal	is possibility.
Turn-Around Time:	Project Name:	Sanbuck		22E-00123 03	Project Manager:	Chance Dixon	Sampler: Hunder Miler M.	olers:	Cooler Temp(Inducing CF): 3.3 - 2 2 3.3 (°C)	Container Preservative HEAL No. Type and # Type 7306399	Tre		V V 003				Received by: Via: Date Time		
Chain-of-Custody Record	Client: EQ4	Wentex Mailing Address: On 510		Phone #:	email or Fax#:	QA/QC Package:	Accreditation:	ype)		Date Time Matrix Sample Name	73 20:00 Soil	1 20:05 BH23-DH I'	V 20:20 & BH23-05 2'				Date: Time: Relinquished by: 6/5/33 33:000 Munter Allen	Date; Time: Relinquished by: W19103 1900 OUMMUMM	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. Released to Imagino: $7/25/2023$ 10:23:39 AM

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: 0	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	242086
4	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
amaxwell	None	7/25/2023

Action 242086