

From: [Eads, Cristina, EMNRD](#)
To: [Chase Settle](#)
Cc: [Billings, Bradford, EMNRD](#)
Subject: Mimosa Federal SWD #1 & #4 Battery Remediation Work Plan – 2RP-2967 (2RP-4162, 2RP-3351)
Date: Monday, November 18, 2019 3:18:22 PM

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RE: Mimosa Federal SWD #1 & #4 Battery Remediation Work Plan – 2RP-2967 (2RP-4162, 2RP-3351)
Eddy County, New Mexico

Chase Settle
Rep Safety & Environmental II
EOG Y Resources, Inc.

Dear Mr. Settle,

Your remediation work plan has been approved for the above referenced site with the following condition:

- When performing confirmation sampling within areas where Liquid Remediat is applied, collect confirmation samples (as described in the Remediation Work Plan) as close as possible to the application area, and half distance between application areas to evaluate effectiveness.

Thank you for your efforts in regards to this project. Please contact me if you have any questions or comments.

Thank You,

Cristina Eads

Environmental Bureau
EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3084
email: Cristina.Eads@state.nm.us



EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

March 15, 2019

NMOCD District II
811 S. First St.
Artesia, NM 88210

Re: Mimosa Federal SWD #1 & #4 Battery
30-015-26449, 30-015-26950
I-4-20S-24E
Eddy County, New Mexico
2RP-2967
2RP-4162
2RP-3351

EOG Resources, Inc. is submitting the enclosed remediation work plan for the above referenced site. The plan is being submitted in reference to the following RP files: 2RP-2967, 2RP-4162, and 2RP-3351.

If you have any questions, feel free to call me at (575) 748-1471.

Respectfully,

A handwritten signature in blue ink, appearing to read "CS", is written over a faint, circular blue stamp.

Chase Settle
Rep Safety & Environmental II
EOG Resources, Inc.

Mimosa Federal SWD #1 & #4 Battery

Remediation Work Plan

I-4-20S-24E

Eddy County, New Mexico

March 15, 2019

2RP-2967

2RP-4162

2RP-3351

I. Location

The release is located approximately 15 miles south of Artesia and 11 miles west on Rock Daisy Road.

II. Background

The Mimosa Federal SWD #1 and #4 Battery has been the location of numerous releases over the years that it has been in operation in its current location. Due to the placement of this battery next to a draw and the number of releases that had occurred in between and around the tanks, EOG Resources, Inc. determined that it was in the best environmental interest to remove all equipment and storage tanks from this site. By doing so, EOG has allowed for a complete environmental cleanup of the entire site since the only remaining equipment will be the injection wellhead and transfer lines. There are 3 active release sites on this location, 2RP-2967, 2RP-4162, and 2RP-3351.

2RP-2967 occurred on April 9, 2015, and consisted of 230 B/PW released with 210 B/PW recovered. The impacted area was north and east of the Mimosa #4 tanks with the release point being tank thief hatches due to overflow.

2RP-4162 occurred on March 9, 2017, and consisted of 15 B/PW released with 14 B/PW recovered. The impacted area was between the two rows of Mimosa #4 tanks with the release point being the water legs.

2RP-3351 occurred on October 7, 2015, and consisted of 7 B/O released with 6 B/O recovered. The impacted area was from the Mimosa #1 oil tank to the northeast corner of the battery, overlapping the pooling area of the 2RP-2967 release.

Although the 2RP-2967 and 2RP-3351 had sampling activities conducted shortly after each release, those samples were deemed inaccurate due to the amount of time that was needed before the equipment could be removed and the moisture events that had occurred over that time which could have migrated contaminants. So EOG began completely resampling the site with initial vertical soil sampling being conducted by use of a backhoe on July 4, 2018. After those analytical results were reported, EOG again contracted a backhoe to sample areas needing further vertical delineation. The second round of sampling was conducted on September 25, 2018. An Air Rotary Drill Rig was first used on October 17, 2018, to further delineate three sample points that were unable to be delineated by the backhoe. On February 11, 2019, EOG was able to finish delineation of one sample point that encountered sloughing issues during previous bore sampling by once again contracting an Air Rotary Drill Rig with the needed air compressor to prevent soil sloughing.

III. Surface and Ground Water

Area surface geology is Cenozoic Quaternary. Based on information from the United States Geological Survey National Water Information System (USGS) regarding this location (Section 4, T20S-R24E), the determined depth to groundwater at the site is approximately 222 feet. Watercourses in the area are dry except for infrequent flows in response to major precipitation events, with the nearest body of significant surface water being the Brantley Lake at 10.57 miles away.

IV. NMOCD Assessment Criteria

The site assessment criteria are as follows:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'
100 Year Floodplain	Yes

Based on the assessment criteria, the NMOCD established RRALs for this site are:

Benzene	10 mg/kg
BTEX	50 mg/kg
TPH	100 mg/kg
Chlorides	600 mg/kg

V. Soils

The area consists of soils that are loam based topsoil that transition to sand and river rock before becoming clay dominant. Natural Resources Conservation Service lists 2 soil types for the site, Ector stony loam on the west side of the location (approximately 18%) and Pima silt loam incorporating approximately 82% of the location. All site work will be performed in Pima silt loam area.

VI. Scope of Work

Based on enclosed analytical results, EOG Resources, Inc. proposes the following remediation activities.

V1 & 2- This area has been identified as the historical drill pit and will be reclaimed as an already approved method with BLM.

V4, 6, 7, 8, 11, 14, & 16- No excavation work, reclamation work will follow protocol set forth for the site.

V3, 9, 10, & 15- These areas will be excavated to four (4) feet bgs with confirmation sampling to occur for the bottom of each excavation and sidewalls. If confirmation samples indicate remaining soil is above 600 mg/kg, further excavation will occur until that threshold is met.

V5 & 18- These areas will be excavated to three (3) feet bgs with confirmation sampling to occur for the bottom of each excavation and sidewalls. If confirmation samples indicate remaining soil is above 600 mg/kg, further excavation will occur until that threshold is met.

V19- This area will have the two (2) to four (4) foot bgs section excavated with confirmation sampling to occur for the bottom of the excavation and sidewalls. If confirmation samples indicate remaining soil is above 600 mg/kg, further excavation will occur until that threshold is met. The surface to two (2) foot section will be used for backfill purposes.

V12- This area will undergo in situ bioremediation to twenty (20) feet bgs. Bioremediation will be conducted by way of installing bore hole vent pipes, approximately one vent pipe for every 100 square feet, within the identified area. These vent pipes will work to both vent off the hydrocarbon and as an application apparatus for Liquid Remediate that will help increase the hydrocarbon breakdown time. Anticipated time for bioremediation is 90 days, and confirmation sampling will be conducted within the bioremediated area between day 80 and 90 of treatment.

Confirmation sampling will be conducted by sampling the surface and every five (5) feet thereafter until 5 feet past the treatment zone. Outside plume confirmation sampling will be completed during the vent installation process to insure that entire area is addressed for bioremediation activities.

V13- This area will be excavated to three (3) feet bgs with confirmation sampling to occur for the bottom of the excavation and sidewalls. If confirmation samples indicate remaining soil is above 600 mg/kg, further excavation will occur until that threshold is met. Once excavation activities are complete, this area will undergo in situ bioremediation to seventy (70) feet bgs. Bioremediation will be conducted by way of installing bore hole vent pipes, approximately one vent pipe for every 100 square feet, within the identified area. These vent pipes will work to both vent off the hydrocarbon and as an application apparatus for Liquid Remediate that will help increase the hydrocarbon breakdown time. Anticipated time for bioremediation is 90 days, and confirmation sampling will be conducted within the bioremediated area between day 80 and 90 of treatment. Confirmation sampling will be conducted by sampling the surface and every five (5) feet thereafter until 5 feet past the treatment zone. Outside plume confirmation sampling will be completed during the vent installation process to insure that entire area is addressed for bioremediation activities.

V17- This area will undergo in situ bioremediation to thirty (30) feet bgs. Bioremediation will be conducted by way of installing bore hole vent pipes, approximately one vent pipe for every 100 square feet, within the identified area. These vent pipes will work to both vent off the hydrocarbon and as an application apparatus for Liquid Remediate that will help increase the hydrocarbon breakdown time. Anticipated time for bioremediation is 90 days, and confirmation sampling will be conducted within the bioremediated area between day 80 and 90 of treatment. Confirmation sampling will be conducted by sampling the surface and every five (5) feet thereafter until 5 feet past the treatment zone. Outside plume confirmation sampling will be completed during the vent installation process to insure that entire area is addressed for bioremediation activities.

Bioremediation Protocol- three-inch PVC vent pipes will be installed from the surface to the determined bottom depth for each remediation area, with one vent installed for approximately every 100 square foot section within the bioremediation area. This will allow for approximately one (1) gallon of Liquid Remediate to be added for every three (3) feet of vent pipe during each application. Treatment cycle will consist of application for 5 consecutive days, with subsequent applications to occur every 25 days.

The estimated volume of soil to be excavated and disposed of is approximately 2,500 cubic yards. The excavated areas will then be backfilled with at least the top foot being of a similar type topsoil. The area will be revegetated with BLM Apomado Falcon Seed Mix during the next planting season, which would occur in July following the completion of remediation activities. When remediation work is completed a C-141 Final Report will be submitted to the NMOCD requesting closure of the site.

Table 1

Soil Analytical Data

Soil Analytical Data

Sample ID	Depth (ft. bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	TPH EXT DRO	Total TPH	Chlorides
V1-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	3080
V1-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	6480
V2-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4880
V2-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4320
V3-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2200
V3-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1360
V3-5'	5'	09/25/18	-	-	-	-	-	-	-	-	-	704
V3-7'	7'	09/25/18	-	-	-	-	-	-	-	-	-	96
V3-9'	9'	09/25/18	-	-	-	-	-	-	-	-	-	64
V4-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	464
V4-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	448
V5-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1230
V5-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	368
V6-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	352
V6-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	176
V7-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	272
V7-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	160
V8-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64
V8-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	176
V9-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	102	24.8	126.8	384
V9-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	397	121	518	768
V9-5'	5'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	48
V9-7'	7'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16
V9-9'	9'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	32
V10-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	112
V10-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	800
V10-5'	5'	09/25/18	-	-	-	-	-	-	-	-	-	512
V10-7'	7'	09/25/18	-	-	-	-	-	-	-	-	-	288
V11-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64
V11-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	80
V12-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	160
V12-3'	3'	07/04/18	<0.200	0.479	3.42	4.03	7.93	576	2290	295	3161	112
V12-5'	5'	09/25/18	-	-	-	-	-	36.6	64.9	<10.0	101.5	-
V12-7'	7'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
V12-9'	9'	09/25/18	-	-	-	-	-	38.9	137	33.8	209.7	-
V12-11'	11'	09/25/18	-	-	-	-	-	51.3	309	58.2	418.5	-
V12-13'	13'	09/25/18	-	-	-	-	-	60.6	551	102	713.6	-
V12-15'	15'	09/25/18	-	-	-	-	-	124	836	149	1109	-
V12-17'	17'	09/25/18	-	-	-	-	-	598	2820	506	3924	-
V12-18.5'	18.5'	09/25/18	-	-	-	-	-	168	1460	280	1908	-
V12-20'	20'	10/17/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
V12-25'	25'	10/17/18	-	-	-	-	-	<10.0	13.4	<10.0	13.4	-
V13-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	198	71.4	269.4	3920
V13-3'	3'	07/04/18	0.891	0.905	33.8	23.6	59.2	534	1860	255	2649	560
V13-5'	5'	09/25/18	<0.025	<0.025	1.70	<0.075	1.70	217	1060	206	1483	-
V13-7'	7'	09/25/18	0.185	<0.025	4.83	0.519	5.54	227	1090	217	1534	-
V13-9'	9'	09/25/18	0.152	<0.025	1.46	0.224	1.84	101	483	89.5	673.5	-
V13-11'	11'	09/25/18	0.186	<0.025	1.12	0.269	1.57	197	865	155	1217	-
V13-13'	13'	09/25/18	0.400	<0.025	1.69	0.244	2.34	142	518	87.1	747.1	-
V13-15'	15'	09/25/18	0.416	<0.025	3.75	0.456	4.62	280	945	159	1384	-
V13-20'	20'	10/17/18	-	-	-	-	-	30.2	177	13.0	220.2	-
V13-25'	25'	10/17/18	-	-	-	-	-	1320	1260	144	2724	-
V13-40'	40'	10/17/18	-	-	-	-	-	451	808	99.1	1358.1	-
V13-50'	50'	10/17/18	-	-	-	-	-	25.3	695	106	826.3	-
V13-58'	58'	10/17/18	-	-	-	-	-	<10.0	114	15.8	129.8	-
V13-70'	70'	02/11/19	-	-	-	-	-	<10.0	13.4	<10.0	13.4	-
V13-105'	105'	02/11/19	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
V13-130'	130'	02/11/19	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
V14-1'	1'	07/04/18	<0.050	<0.050	0.073	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	352
V14-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	672
V14-4'	4'	09/25/18	-	-	-	-	-	-	-	-	-	400
V15-1'	1'	07/04/18	<0.200	6.93	23.5	53.5	83.9	469	2400	414	3283	2560
V15-3'	3'	07/04/18	<0.050	<0.050	0.143	0.406	0.549	10.8	442	105	557.8	3200
V15-5'	5'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	128

Mimosa Federal SWD #1 & #4 Battery
Remediation Work Plan
2RP-2967, 4162, 3351

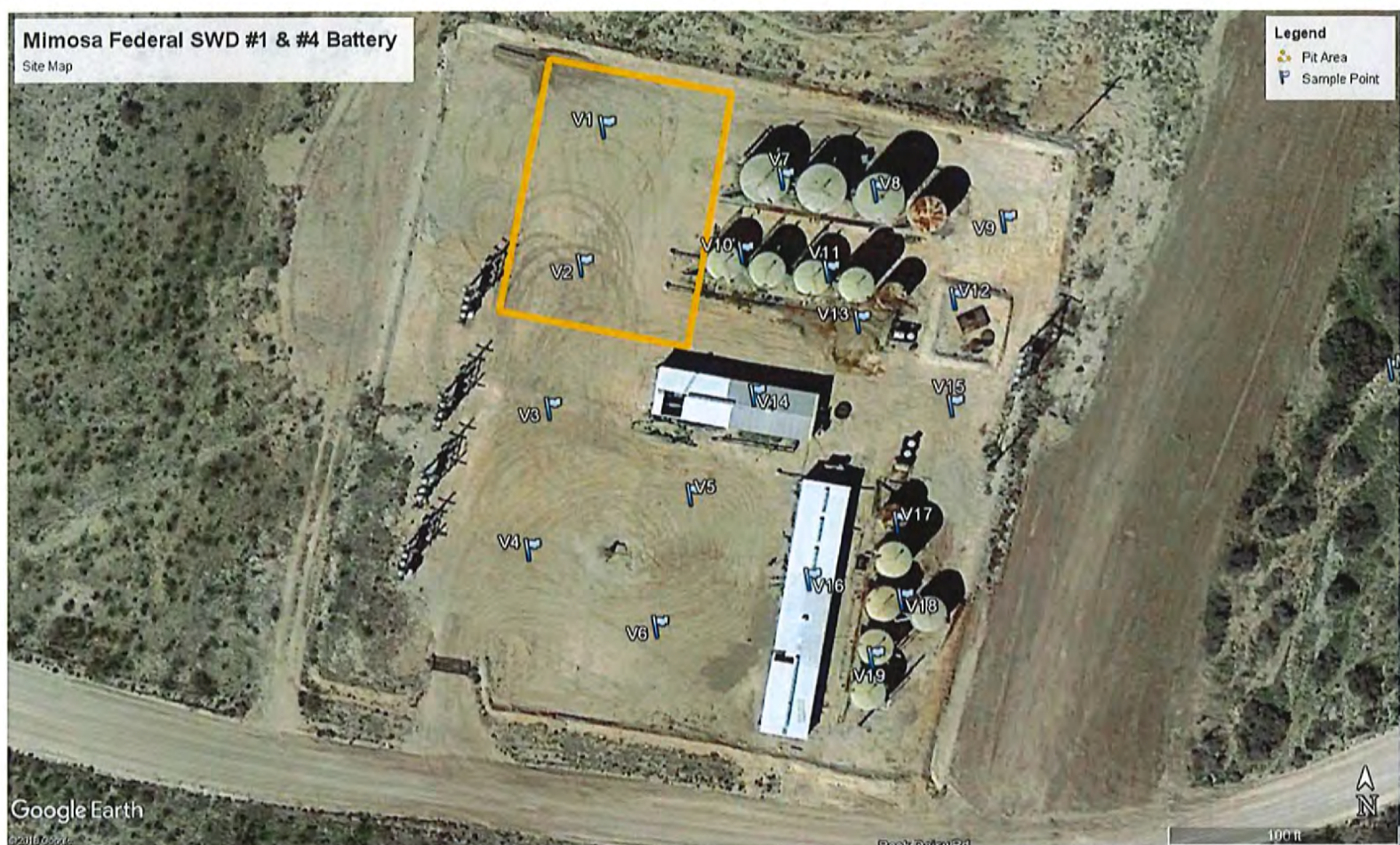


March 15, 2019

V15-7'	7'	09/25/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	192
V16-1'	1'	07/04/18	<0.050	<0.050	0.052	<0.150	0.052	<10.0	<10.0	<10.0	<10.0	272
V16-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	256
V17-1'	1'	07/04/18	<0.050	0.102	0.530	<0.150	0.653	34.9	212	45.0	291.9	224
V17-3'	3'	07/04/18	<0.050	0.889	4.05	5.34	10.3	495	1280	271	2046	288
V17-5'	5'	09/25/18	-	-	-	-	-	194	438	76.7	708.7	-
V17-7'	7'	09/25/18	-	-	-	-	-	134	247	15.1	396.1	-
V17-9'	9'	09/25/18	-	-	-	-	-	231	250	42.0	523	-
V17-11'	11'	09/25/18	-	-	-	-	-	172	245	31.9	448.9	-
V17-13'	13'	09/25/18	-	-	-	-	-	187	208	40.9	435.9	-
V17-15'	15'	09/25/18	-	-	-	-	-	98.9	143	20.7	262.6	-
V17-20'	20'	10/17/18	-	-	-	-	-	11.4	75.2	<10.0	86.6	-
V17-30'	30'	10/17/18	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	-
V18-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	39.9	22.9	56.8	3200
V18-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	560
V19-1'	1'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	576
V19-3'	3'	07/04/18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	880
V19-5'	5'	09/25/18	-	-	-	-	-	-	-	-	-	224

Figure 1

Site Map with Sample Points



Drill Pit Photos

Mimosa Federal SWD #1 & #4 Battery
Remediation Work Plan
2RP-2967, 4162, 3351



March 15, 2019



Appendix A

Soil Sample Laboratory Data



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

July 11, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 07/06/18 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V1 - 1' (H801839-01)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0		
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8		
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9		
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2		
Total BTEX	<0.300	0.300	07/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3080	16.0	07/09/2018	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2018	ND	213	107	200	5.75		
DRO >C10-C28*	<10.0	10.0	07/06/2018	ND	214	107	200	19.7		
EXT DRO >C28-C36	<10.0	10.0	07/06/2018	ND						

Surrogate: 1-Chlorooctane 67.3 % 41-142

Surrogate: 1-Chlorooctadecane 60.6 % 37.6-147

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V1 - 3' (H801839-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0		
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8		
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9		
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2		
Total BTEX	<0.300	0.300	07/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6480	16.0	07/09/2018	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2018	ND	213	107	200	5.75	
DRO >C10-C28*	<10.0	10.0	07/06/2018	ND	214	107	200	19.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2018	ND					

Surrogate: 1-Chlorooctane 97.6 % 41-142

Surrogate: 1-Chlorooctadecane 86.8 % 37.6-147

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V2 - 1' (H801839-03)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0		
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8		
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9		
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2		
Total BTEX	<0.300	0.300	07/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	07/09/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2018	ND	213	107	200	5.75	
DRO >C10-C28*	<10.0	10.0	07/06/2018	ND	214	107	200	19.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2018	ND					

Surrogate: 1-Chlorooctane 91.2 % 41-142

Surrogate: 1-Chlorooctadecane 80.6 % 37.6-147

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Celestine Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V2 - 3' (H801839-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0	
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8	
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9	
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2	
Total BTEX	<0.300	0.300	07/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	07/09/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2018	ND	213	107	200	5.75	
DRO >C10-C28*	<10.0	10.0	07/06/2018	ND	214	107	200	19.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2018	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 92.7 % 37.6-147

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Celestine Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
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105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V3 - 1' (H801839-05)

BTEx 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0		
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8		
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9		
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2		
Total BTEX	<0.300	0.300	07/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2200	16.0	07/09/2018	ND	416	104	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/07/2018	ND	213	107	200	5.75		
DRO >C10-C28*	<10.0	10.0	07/07/2018	ND	214	107	200	19.7		
EXT DRO >C28-C36	<10.0	10.0	07/07/2018	ND						

Surrogate: 1-Chlorooctane 88.9 % 41-142

Surrogate: 1-Chlorooctadecane 78.9 % 37.6-147

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EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V3 - 3' (H801839-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0	
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8	
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9	
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2	
Total BTX	<0.300	0.300	07/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1360	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/07/2018	ND	213	107	200	5.75	
DRO >C10-C28*	<10.0	10.0	07/07/2018	ND	214	107	200	19.7	
EXT DRO >C28-C36	<10.0	10.0	07/07/2018	ND					

Surrogate: 1-Chlorooctane 97.6 % 41-142

Surrogate: 1-Chlorooctadecane 90.1 % 37.6-147

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V4 - 1' (H801839-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2018	ND	1.61	80.7	2.00	26.0	
Toluene*	<0.050	0.050	07/07/2018	ND	1.62	81.1	2.00	24.8	
Ethylbenzene*	<0.050	0.050	07/07/2018	ND	1.62	81.0	2.00	22.9	
Total Xylenes*	<0.150	0.150	07/07/2018	ND	5.01	83.5	6.00	24.2	
Total BTEX	<0.300	0.300	07/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 95.4 % 41-142

Surrogate: 1-Chlorooctadecane 83.9 % 37.6-147

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V4 - 3' (H801839-08)

BTEX 8021B			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884			
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331			
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517			
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772			
Total BTEX	<0.300	0.300	07/09/2018	ND							

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 69.8-142

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	448	16.0	07/09/2018	ND	416	104	400	0.00			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217			
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678			
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND							

Surrogate: 1-Chlorooctane 93.1 % 41-142

Surrogate: 1-Chlorooctadecane 82.3 % 37.6-147

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CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V5 - 1' (H801839-09)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 108 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 92.4 % 41-142

Surrogate: 1-Chlorooctadecane 79.1 % 37.6-147

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V5 - 3' (H801839-10)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 99.6 % 41-142

Surrogate: 1-Chlorooctadecane 87.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V6 - 1' (H801839-11)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884		
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331		
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517		
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772		
Total BTEX	<0.300	0.300	07/09/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	07/09/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217		
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678		
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND						

Surrogate: 1-Chlorooctane 84.9 % 41-142

Surrogate: 1-Chlorooctadecane 71.8 % 37.6-147

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V6 - 3' (H801839-12)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 81.0 % 37.6-147

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V7 - 1' (H801839-13)

BTX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884		
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331		
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517		
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772		
Total BTX	<0.300	0.300	07/09/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	07/09/2018	ND	416	104	400	0.00		

TPH 8015M			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217		
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678		
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND						

Surrogate: 1-Chlorooctane 92.9 % 41-142

Surrogate: 1-Chlorooctadecane 80.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V7 - 3' (H801839-14)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 95.6 % 41-142

Surrogate: 1-Chlorooctadecane 83.1 % 37.6-147

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Celest D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V8 - 1' (H801839-15)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884		
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331		
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517		
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772		
Total BTEX	<0.300	0.300	07/09/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217		
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678		
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND						

Surrogate: 1-Chlorooctane 87.3 % 41-142

Surrogate: 1-Chlorooctadecane 75.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V8 - 3' (H801839-16)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 90.6 % 41-142

Surrogate: 1-Chlorooctadecane 78.3 % 37.6-147

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EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V9 - 1' (H801839-17)

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	102	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	24.8	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 78.7 % 41-142

Surrogate: 1-Chlorooctadecane 74.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V9 - 3' (H801839-18)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	397	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	121	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 110 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V10 - 1' (H801839-19)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 84.4 % 41-142

Surrogate: 1-Chlorooctadecane 73.1 % 37.6-147

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V10 - 3' (H801839-20)

BTEX 8021B			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884			
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331			
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517			
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772			
Total BTEX	<0.300	0.300	07/09/2018	ND							

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 90.2 % 41-142

Surrogate: 1-Chlorooctadecane 80.8 % 37.6-147

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V11 - 1' (H801839-21)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 91.7 % 41-142

Surrogate: 1-Chlorooctadecane 82.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V11 - 3' (H801839-22)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 95.6 % 41-142

Surrogate: 1-Chlorooctadecane 86.5 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V12 - 1' (H801839-23)

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 81.3 % 41-142

Surrogate: 1-Chlorooctadecane 73.8 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V12 - 3' (H801839-24)

BTEX 8021B		mg/kg	Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/10/2018	ND	2.09	104	2.00	0.884	
Toluene*	0.479	0.200	07/10/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	3.42	0.200	07/10/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	4.03	0.600	07/10/2018	ND	6.32	105	6.00	0.772	
Total BTEX	7.93	1.20	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 157 % 69.8-142

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	576	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	2290	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	295	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 129 % 41-142

Surrogate: 1-Chlorooctadecane 133 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V13 - 1' (H801839-25)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/09/2018	ND	2.09	104	2.00	0.884		
Toluene*	<0.050	0.050	07/09/2018	ND	2.03	102	2.00	0.331		
Ethylbenzene*	<0.050	0.050	07/09/2018	ND	2.02	101	2.00	0.517		
Total Xylenes*	<0.150	0.150	07/09/2018	ND	6.32	105	6.00	0.772		
Total BTEX	<0.300	0.300	07/09/2018	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 110 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3920	16.0	07/09/2018	ND	416	104	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	198	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	71.4	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

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Celestine Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 3' (H801839-26)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.891	0.200	07/10/2018	ND	2.09	104	2.00	0.884	
Toluene*	0.905	0.200	07/10/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	33.8	0.200	07/10/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	23.6	0.600	07/10/2018	ND	6.32	105	6.00	0.772	
Total BTX	59.2	1.20	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 133 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	534	10.0	07/09/2018	ND	213	106	200	0.217	
DRO >C10-C28*	1860	10.0	07/09/2018	ND	211	105	200	0.678	
EXT DRO >C28-C36	255	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 124 % 41-142

Surrogate: 1-Chlorooctadecane 146 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V14 - 1' (H801839-27)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	2.09	104	2.00	0.884	
Toluene*	<0.050	0.050	07/10/2018	ND	2.03	102	2.00	0.331	
Ethylbenzene*	0.073	0.050	07/10/2018	ND	2.02	101	2.00	0.517	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	6.32	105	6.00	0.772	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 87.1 % 41-142

Surrogate: 1-Chlorooctadecane 96.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V14 - 3' (H801839-28)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 98.3 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V15 - 1' (H801839-29)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	6.93	0.200	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	23.5	0.200	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	53.5	0.600	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	83.9	1.20	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 136 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	469	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	2400	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	414	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 130 % 41-142

Surrogate: 1-Chlorooctadecane 135 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V15 - 3' (H801839-30)

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	0.143	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	0.406	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	0.549	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 69.8-142

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	10.8	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	442	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	105	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 94.5 % 41-142

Surrogate: 1-Chlorooctadecane 122 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V16 - 1' (H801839-31)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	0.052	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.6 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V16 - 3' (H801839-32)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PJC) 107 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 88.8 % 41-142

Surrogate: 1-Chlorooctadecane 94.5 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V17 - 1' (H801839-33)

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	0.102	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	0.530	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTX	0.653	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 128 % 69.8-142

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	34.9	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	212	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	45.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 91.4 % 41-142

Surrogate: 1-Chlorooctadecane 100 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V17 - 3' (H801839-34)

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	0.889	0.500	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	4.05	0.500	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	5.34	1.50	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	10.3	3.00	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 118 % 69.8-142

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	495	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	1280	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	271	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 110 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 07/06/2018
Reported: 07/11/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 07/04/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V18 - 1' (H801839-35)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 69.8-142

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	39.9	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	22.9	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 83.7 % 41-142

Surrogate: 1-Chlorooctadecane 89.0 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V18 - 3' (H801839-36)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 84.8 % 41-142

Surrogate: 1-Chlorooctadecane 91.9 % 37.6-147

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*=Accredited Analyte

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Celestine Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V19 - 1' (H801839-37)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 109 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 87.5 % 41-142

Surrogate: 1-Chlorooctadecane 94.7 % 37.6-147

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*=Accredited Analyte

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	07/06/2018	Sampling Date:	07/04/2018
Reported:	07/11/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V19 - 3' (H801839-38)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/10/2018	ND	1.96	98.1	2.00	0.923	
Toluene*	<0.050	0.050	07/10/2018	ND	1.94	96.8	2.00	0.143	
Ethylbenzene*	<0.050	0.050	07/10/2018	ND	1.91	95.4	2.00	0.0212	
Total Xylenes*	<0.150	0.150	07/10/2018	ND	5.88	98.1	6.00	0.104	
Total BTEX	<0.300	0.300	07/10/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	07/09/2018	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2018	ND	178	88.9	200	0.297	
DRO >C10-C28*	<10.0	10.0	07/09/2018	ND	209	104	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	07/09/2018	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 92.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Company Name: EOG Y Resources Inc.

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Fax No:

Sampler Signature: [Signature]

e-mail:

Chase.Settle@eogresources.com

Project Name: Mimosa SWD #1 & #4

Project #:

Project Loc: Mimosa SWD #1 & #4

PO #: 205-0750

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: H801839

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: <u>8015B</u>	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: <u>8021B</u>	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V1-1'			7/4/2018	7:15 AM		1	X								S	X														X
2	V1-3'			7/4/2018	7:16 AM		1	X								S	X														X
3	V2-1'			7/4/2018	7:19 AM		1	X								S	X														X
4	V2-3'			7/4/2018	7:20 AM		1	X								S	X														X
5	V3-1'			7/4/2018	7:22 AM		1	X								S	X														X
6	V3-3'			7/4/2018	7:23 AM		1	X								S	X														X
7	V4-1'			7/4/2018	7:25 AM		1	X								S	X														X
8	V4-3'			7/4/2018	7:26 AM		1	X								S	X														X
9	V5-1'			7/4/2018	7:28 AM		1	X								S	X														X
10	V5-3'			7/4/2018	7:29 AM		1	X								S	X														X

Special Instructions: **TPH EXTENDED needed.**

Laboratory Comments:

Sample Containers Intact? ☒ N

VOCs Free of Headspace? ☒ N

Labels on container(s)? ☒ N

Custody seals on container(s)? ☒ N

Sample Hand Delivered by Sampler/Client Rep. ? ☒ N

UPS ☒ N

DHL ☒ N

FedEx ☒ N

Lone Star ☒ N

Temperature Upon Receipt: 3.7°C



ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Company Name: EOG Y Resources Inc.

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Fax No:

Sampler Signature: *[Signature]* e-mail: Chase.Settle@eoqresources.com

Project Name: Mimosa SWD #1 & #4

Project #:

Project Loc: Mimosa SWD #1 & #4

PO #: 205-0750

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: H801839

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 8015B	TPH: TX 1005 TX 1006	Callons (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	V6-1'			7/4/2018	7:32 AM		1	X								S	X														X
12	V6-3'			7/4/2018	7:33 AM		1	X								S	X														X
13	V7-1'			7/4/2018	7:35 AM		1	X								S	X														X
14	V7-3'			7/4/2018	7:36 AM		1	X								S	X														X
15	V8-1'			7/4/2018	7:38 AM		1	X								S	X														X
16	V8-3'			7/4/2018	7:39 AM		1	X								S	X														X
17	V9-1'			7/4/2018	7:41 AM		1	X								S	X														X
18	V9-3'			7/4/2018	7:42 AM		1	X								S	X														X
19	V10-1'			7/4/2018	7:45 AM		1	X								S	X														X
20	V10-3'			7/4/2018	7:46 AM		1	X								S	X														X

Special Instructions:

TPH EXTENDED needed.

Relinquished by:

Date: 7/6/18 Time: 10:00

Received by:

Date: 7-6-18

Time: 12:05

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by: ELOTT:

Date: Time:

Laboratory Comments:

Sample Containers Intact? ☒ N

VOCs Free of Headspace? ☒ N

Labels on container(s)? ☒ N

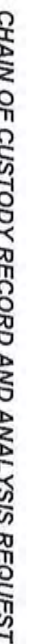
Custody seals on container(s)? ☒ N

Sample Hand Delivered by Sampler/Client Rep. ? ☒ N

by Courier? ☒ N

UPS ☒ DHL ☒ FedEx ☒ Lone Star ☒ N

Temperature Upon Receipt: 8.7°C

Received by *OCD*: 6/12/2026 7:49:51 AM



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" being more prominent.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V3 - 5' (H802730-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	09/27/2018	ND	432	108	400	0.00	

Sample ID: V3 - 7' (H802730-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/27/2018	ND	432	108	400	0.00	

Sample ID: V3 - 9' (H802730-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/27/2018	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Page 61 of 147

Received by OCD: 6/12/2026 7:49:51 AM

Released to Imaging: 6/12/2026 7:50:58 AM



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Caley D. Keene".

Caley D. Keene, Lab Director/Quality Manager



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September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Page 64 of 147
Received by OCD: 6/12/2026 7:49:51 AM
Released to Imaging: 6/12/2026 7:50:58 AM



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V9 - 5' (H802731-01)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/27/2018	ND	432	108	400	0.00	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					
Surrogate: 1-Chlorooctane	93.3 %	41-142							
Surrogate: 1-Chlorooctadecane	94.6 %	37.6-147							

Sample ID: V9 - 7' (H802731-02)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/27/2018	ND	432	108	400	0.00	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					
Surrogate: 1-Chlorooctane	91.8 %	41-142							
Surrogate: 1-Chlorooctadecane	90.6 %	37.6-147							

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Ceely D. Keene

Ceely D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V9 - 9' (H802731-03)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/27/2018	ND	432	108	400	0.00	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					
Surrogate: 1-Chlorooctane	94.4 %	41-142							
Surrogate: 1-Chlorooctadecane	93.3 %	37.6-147							

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Caley D. Keene, Lab Director/Quality Manager



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September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V10 - 5' (H802732-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	09/27/2018	ND	432	108	400	0.00	

Sample ID: V10 - 7' (H802732-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	09/27/2018	ND	432	108	400	0.00	

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
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This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V12 - 5' (H802733-01)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	36.6	10.0	09/28/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	64.9	10.0	09/28/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 96.7 % 41-142

Surrogate: 1-Chlorooctadecane 91.1 % 37.6-147

Sample ID: V12 - 7' (H802733-02)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/28/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	<10.0	10.0	09/28/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/28/2018	ND					

Surrogate: 1-Chlorooctane 88.8 % 41-142

Surrogate: 1-Chlorooctadecane 87.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V12 - 9' (H802733-03)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	38.9	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	137	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	33.8	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 85.9 % 41-142

Surrogate: 1-Chlorooctadecane 84.0 % 37.6-147

Sample ID: V12 - 11' (H802733-04)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	51.3	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	309	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	58.2	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 83.9 % 41-142

Surrogate: 1-Chlorooctadecane 85.4 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 09/26/2018
Reported: 09/28/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 09/25/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V12 - 13' (H802733-05)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	60.6	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	551	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	102	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 92.2 % 41-142

Surrogate: 1-Chlorooctadecane 99.1 % 37.6-147

Sample ID: V12 - 15' (H802733-06)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	124	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	836	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	149	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 92.5 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V12 - 17' (H802733-07)

TPH 8015M	mg/kg		Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	598	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	2820	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	506	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 114 % 41-142

Surrogate: 1-Chlorooctadecane 148 % 37.6-147

Sample ID: V12 - 18.5' (H802733-08)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	168	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	1460	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	280	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 94.4 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

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Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V14 - 4' (H802735-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	09/27/2018	ND	432	108	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

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Cailey D. Keene

Cailey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V15 - 5' (H802736-01)

Chloride, SM4500Cl-B			mg/kg Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	09/27/2018	ND	432	108	400	0.00		
TPH 8015M			mg/kg Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	194	97.2	200	1.98		
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	208	104	200	3.40		
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND						
Surrogate: 1-Chlorooctane	85.2 %	41-142								
Surrogate: 1-Chlorooctadecane	80.9 %	37.6-147								

Sample ID: V15 - 7' (H802736-02)

Chloride, SM4500Cl-B			mg/kg Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	09/27/2018	ND	432	108	400	0.00		
TPH 8015M			mg/kg Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	194	97.2	200	1.98		
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	208	104	200	3.40		
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND						
Surrogate: 1-Chlorooctane	86.1 %	41-142								
Surrogate: 1-Chlorooctadecane	81.6 %	37.6-147								

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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October 01, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 09/26/2018
Reported: 10/01/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 09/25/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V13 - 5' (H802734-01)

BTEX 8260B		mg/kg	Analyzed By: ms				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	1.70	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	<0.075	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTEX	1.70	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 102 % 90.4-111

Surrogate: Toluene-d8 137 % 85.3-114

Surrogate: 4-Bromofluorobenzene 178 % 80.1-121

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	217	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	1060	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	206	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 99.9 % 41-142

Surrogate: 1-Chlorooctadecane 110 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 7' (H802734-02)

BTX 8260B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.185	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	4.83	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	0.519	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTX	5.54	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 103 % 90.4-111

Surrogate: Toluene-d8 188 % 85.3-114

Surrogate: 4-Bromofluorobenzene 222 % 80.1-121

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	227	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	1090	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	217	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 95.7 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 9' (H802734-03)

BTEX 8260B		mg/kg	Analyzed By: ms					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.152	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	1.46	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	0.224	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTEX	1.84	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 103 % 90.4-111

Surrogate: Toluene-d8 153 % 85.3-114

Surrogate: 4-Bromofluorobenzene 189 % 80.1-121

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	101	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	483	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	89.5	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 85.9 % 41-142

Surrogate: 1-Chlorooctadecane 90.1 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 11' (H802734-04)

BTEX 8260B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.186	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	1.12	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	0.269	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTEX	1.57	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 99.2 % 90.4-111

Surrogate: Toluene-d8 150 % 85.3-114

Surrogate: 4-Bromofluorobenzene 172 % 80.1-121

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	197	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	865	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	155	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 98.5 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 09/26/2018
Reported: 10/01/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 09/25/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V13 - 13' (H802734-05)

BTEX 8260B	mg/kg	Analyzed By: ms						S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.400	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	1.69	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	0.244	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTEX	2.34	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 102 % 90.4-111

Surrogate: Toluene-d8 170 % 85.3-114

Surrogate: 4-Bromofluorobenzene 203 % 80.1-121

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	142	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	518	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	87.1	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 92.2 % 41-142

Surrogate: 1-Chlorooctadecane 96.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	10/01/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 15' (H802734-06)

BTX 8260B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.416	0.025	09/28/2018	ND	1.95	97.4	2.00	4.82	
Toluene*	<0.025	0.025	09/28/2018	ND	1.94	97.2	2.00	8.70	
Ethylbenzene*	3.75	0.025	09/28/2018	ND	2.03	101	2.00	8.99	
Total Xylenes*	0.456	0.075	09/28/2018	ND	6.22	104	6.00	8.96	
Total BTX	4.62	0.150	09/28/2018	ND					

Surrogate: Dibromofluoromethane 100 % 90.4-111

Surrogate: Toluene-d8 218 % 85.3-114

Surrogate: 4-Bromofluorobenzene 260 % 80.1-121

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	280	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	945	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	159	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 100 % 41-142

Surrogate: 1-Chlorooctadecane 98.4 % 37.6-147

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*=Accredited Analyte

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Celestine Keene

Celestine D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES
101 East Marland, Hobbs, NM

101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Project Name:

Mimosa SVD #1 & #4

Company Name EOG Y Resources Inc.

Project #:

Company Address: 105 South 4th Street

Project Loc:

Mimosa SWD #1 & #4

City/State/Zip: Artesia, NM 88210

PO #: 205-0750

Telephone No: 575-748-4171

Fax No:

Report Format:

☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:

e-mail:

Chase.Settle@geogresources.com

(lab use only)

ORDER #:

[illegible]



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 09/26/2018
Reported: 09/28/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 09/25/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V17 - 5' (H802737-01)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	194	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	438	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	76.7	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 93.1 % 41-142
Surrogate: 1-Chlorooctadecane 89.3 % 37.6-147

Sample ID: V17 - 7' (H802737-02)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	134	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	247	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	15.1	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 92.4 % 41-142
Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V17 - 9' (H802737-03)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	231	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	250	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	42.0	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 83.4 % 37.6-147

Sample ID: V17 - 11' (H802737-04)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	172	10.0	09/27/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	245	10.0	09/27/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	31.9	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 87.6 % 37.6-147

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V17 - 13' (H802737-05)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	187	10.0	09/27/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	208	10.0	09/27/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	40.9	10.0	09/27/2018	ND					
Surrogate: 1-Chlorooctane									
	92.9 %	41-142							
Surrogate: 1-Chlorooctadecane									
	89.5 %	37.6-147							

Sample ID: V17 - 15' (H802737-06)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	98.9	10.0	09/28/2018	ND	185	92.4	200	5.33	
DRO >C10-C28*	143	10.0	09/28/2018	ND	191	95.6	200	7.02	
EXT DRO >C28-C36	20.7	10.0	09/28/2018	ND					
Surrogate: 1-Chlorooctane									
	89.8 %	41-142							
Surrogate: 1-Chlorooctadecane									
	87.4 %	37.6-147							

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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September 28, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" being more prominent.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	09/26/2018	Sampling Date:	09/25/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V19 - 5' (H802738-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/27/2018	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read 'Celey D. Keene'.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

October 24, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/22/2018
Reported: 10/24/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 10/17/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V13 - 20' (H803024-01)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	30.2	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	177	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	13.0	10.0	10/23/2018	ND					

Surrogate: 1-Chlorooctane 92.5 % 41-142

Surrogate: 1-Chlorooctadecane 90.8 % 37.6-147

Sample ID: V13 - 25' (H803024-02)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1320	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	1260	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	144	10.0	10/23/2018	ND					

Surrogate: 1-Chlorooctane 126 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/22/2018
Reported: 10/24/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 10/17/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V13 - 40' (H803024-03)

TPH 8015M			mg/kg Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	451	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	808	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	99.1	10.0	10/23/2018	ND					
Surrogate: 1-Chlorooctane	115 %	41-142							
Surrogate: 1-Chlorooctadecane	115 %	37.6-147							

Sample ID: V13 - 50' (H803024-04)

TPH 8015M			mg/kg Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	25.3	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	695	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	106	10.0	10/23/2018	ND					
Surrogate: 1-Chlorooctane	97.9 %	41-142							
Surrogate: 1-Chlorooctadecane	113 %	37.6-147							

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	10/22/2018	Sampling Date:	10/17/2018
Reported:	10/24/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13 - 58' (H803024-05)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	114	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	15.8	10.0	10/23/2018	ND					
Surrogate: 1-Chlorooctane	95.7 %	41-142							
Surrogate: 1-Chlorooctadecane	97.0 %	37.6-147							

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

October 24, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/22/2018
Reported: 10/24/2018
Project Name: MIMOSA SWD #1 & #4
Project Number: NOT GIVEN
Project Location: MIMOSA SWD #1 & #4

Sampling Date: 10/17/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: V12 - 20' (H803025-01)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	<10.0	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	<10.0	10.0	10/23/2018	ND					
Surrogate: 1-Chlorooctane	90.5 %	41-142							
Surrogate: 1-Chlorooctadecane	86.9 %	37.6-147							

Sample ID: V12 - 25' (H803025-02)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	13.4	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	<10.0	10.0	10/23/2018	ND					
Surrogate: 1-Chlorooctane	88.1 %	41-142							
Surrogate: 1-Chlorooctadecane	85.5 %	37.6-147							

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



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October 24, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

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Method EPA 552.2	Haloacetic Acids (HAA-5)
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Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	10/22/2018	Sampling Date:	10/17/2018
Reported:	10/24/2018	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V17 - 20' (H803026-01)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	11.4	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	75.2	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	<10.0	10.0	10/23/2018	ND					

Surrogate: 1-Chlorooctane 89.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.1 % 37.6-147

Sample ID: V17 - 30' (H803026-02)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/23/2018	ND	201	100	200	0.602	
DRO >C10-C28*	<10.0	10.0	10/23/2018	ND	193	96.7	200	0.656	
EXT DRO >C28-C36	<10.0	10.0	10/23/2018	ND					

Surrogate: 1-Chlorooctane 91.1 % 41-142

Surrogate: 1-Chlorooctadecane 86.5 % 37.6-147

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

[illegible]



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February 15, 2019

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

Enclosed are the results of analyses for samples received by the laboratory on 02/13/19 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/13/2019	Sampling Date:	02/11/2019
Reported:	02/15/2019	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13-70' S (H900595-01)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/15/2019	ND	167	83.7	200	6.74	
DRO >C10-C28*	13.4	10.0	02/15/2019	ND	192	96.0	200	11.5	
EXT DRO >C28-C36	<10.0	10.0	02/15/2019	ND					
Surrogate: 1-Chlorooctane	71.9 %	41-142							
Surrogate: 1-Chlorooctadecane	73.5 %	37.6-147							

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RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

February 15, 2019

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: MIMOSA SWD #1 & #4

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Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/13/2019	Sampling Date:	02/11/2019
Reported:	02/15/2019	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13-105' S (H900592-01)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/15/2019	ND	167	83.7	200	6.74	
DRO >C10-C28*	<10.0	10.0	02/15/2019	ND	192	96.0	200	11.5	
EXT DRO >C28-C36	<10.0	10.0	02/15/2019	ND					
Surrogate: 1-Chlorooctane	81.3 %	41-142							
Surrogate: 1-Chlorooctadecane	81.2 %	37.6-147							

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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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February 15, 2019

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Caley D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/13/2019	Sampling Date:	02/11/2019
Reported:	02/15/2019	Sampling Type:	Soil
Project Name:	MIMOSA SWD #1 & #4	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	MIMOSA SWD #1 & #4		

Sample ID: V13-130' S (H900587-01)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/15/2019	ND	168	83.8	200	11.3	
DRO >C10-C28*	<10.0	10.0	02/15/2019	ND	170	85.1	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	02/15/2019	ND					
Surrogate: 1-Chlorooctane	77.3 %	41-142							
Surrogate: 1-Chlorooctadecane	74.8 %	37.6-147							

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
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Caley D. Keene, Lab Director/Quality Manager

(505) 393-2326 FAX (505) 393-2476

Released to Imaging: 0/17/2020 1:50:58 AM

Received by OCD: 6/12/2026 7:49:51 AM

Appendix B

Soil Sample Bore Logs

Project #:

Technician:

Sample Type: Split Spoon

Drill Company: *Talon*

Hole Diameter: 4"

[illegible]

Project #: 75

Technician:

Sample Type: Air K9000

Drill Company: Talon

Hole Diameter: 4"

[illegible]

Appendix C

USGS Groundwater Data



National Water Information System: Map View

Sites

Map Layers

Search Results

Export Sites

Site Number	Site Name
323610104342801	20S.24E.03.14322
323611104343701	20S.24E.03.132443

Search Parameters

Explanation of Symbols





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =
• 323610104342801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323610104342801 20S.24E.03.14322

Available data for this site

Eddy County, New Mexico

Hydrologic Unit Code --

Latitude 32°36'10", Longitude 104°34'28" NAD27

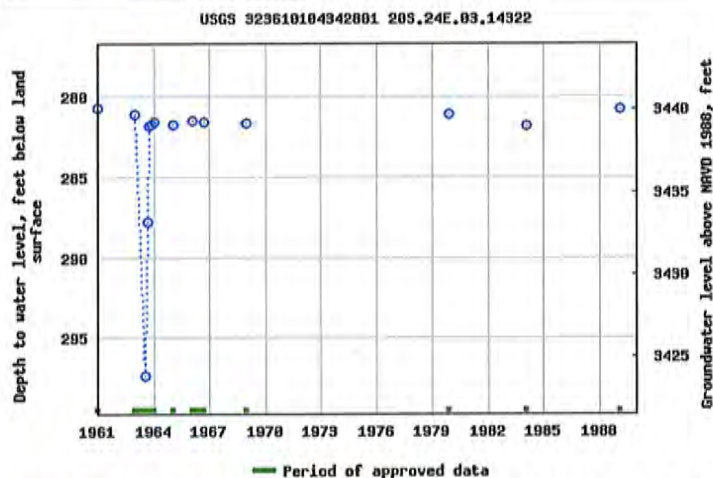
Land-surface elevation 3,721 feet above NAVD88

The depth of the well is 310 feet below land surface.

This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =
• 323611104343701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323611104343701 20S.24E.03.132443

Available data for this site

Eddy County, New Mexico

Hydrologic Unit Code --

Latitude 32°36'11", Longitude 104°34'37" NAD27

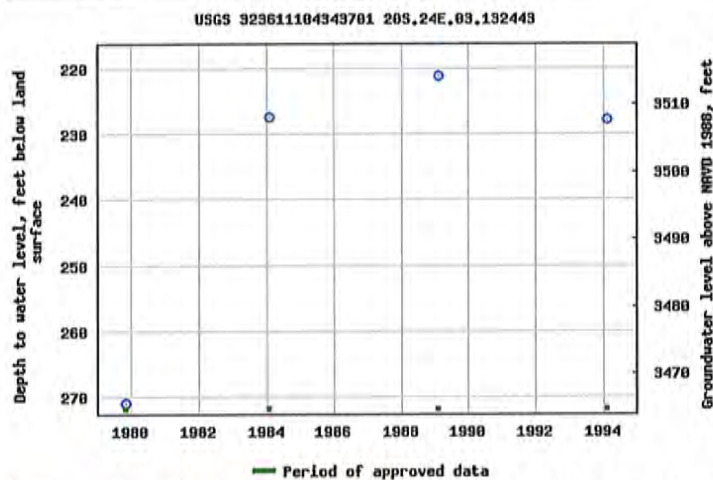
Land-surface elevation 3,736 feet above NAVD88

The depth of the well is 465 feet below land surface.

This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Appendix D

NRCS Soil Map



Soil Map—Eddy Area, New Mexico
(Mimosa Federal SWD #1 & #4 Battery)

MAP LEGEND

Area of Interest (AOI)			Spill Area
	Area of Interest (AOI)		Stony Spot
Soils			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
Special Point Features		Water Features	
	Blowout		Streams and Canals
	Borrow Pit	Transportation	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	Background	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 14, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 30, 2015—Dec 15, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EC	Ector stony loam, 0 to 9 percent slopes	0.3	18.1%
PM	Pima silt loam, 0 to 1 percent slopes	1.5	81.9%
Totals for Area of Interest		1.9	100.0%

Appendix E

Form C-141 Initials

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

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

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 22 2015
RECEIVED

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1511738138

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	25675	Contact Chase Settle
Address 104 S. 4 th Street		Telephone No. 575-748-1471
Facility Name Mimosa Federal SWD #4		Facility Type Battery

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-26950
--------------------------	--------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	4	20S	24E	660	South	1980	West	Eddy

Latitude 32.59735 Longitude -104.59513

NATURE OF RELEASE

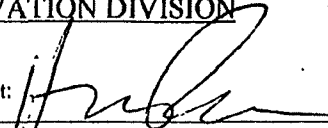
Type of Release Produced Water	Volume of Release 230 B/PW	Volume Recovered 210 B/PW
Source of Release Production tank	Date and Hour of Occurrence 4/9/2015; AM	Date and Hour of Discovery 4/9/2015; AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? Mike Bratcher, Heather Patterson, Randy Dade, Jim Amos	
By Whom? Robert Asher/Yates Petroleum Corporation	Date and Hour 4/9/2015; 5:09 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The power supply was interrupted, causing the pumps not to start and the tanks to overflow. Vacuum truck(s) were called.

Describe Area Affected and Cleanup Action Taken.*
An approximate area of 91' X 15' was affected north of the battery string, and an approximate area of 57' X 37' was affected east of the battery string within the binned battery. Called an electrician to restore power to the pumps, a contractor to fix the warning alarms, vacuum truck to remove standing fluid, and a backhoe to excavate impacted soils. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. Depth to Ground Water: >100' (approximately 360', Section 4, T20S-R24E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" 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 a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Chase Settle	Approved by Environmental Specialist: 	
Title: NM Environmental Regulatory Agent	Approval Date: 4/27/15	Expiration Date:
E-mail Address: CSettle@yatespetroleum.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines	Attached ☐
Date: April 22, 2015	Phone: 575-748-4111	Remediation Proposal NO.

* Attach Additional Sheets If Necessary

LATER THAN: 5/27/16

2RP-2967

NM OIL CONSERVATION
 ARTESIA DISTRICT

APR 03 2017

Form C-141
Revised August 8, 2011

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED by to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

11AB1709533325 **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company EOG Y Resources, Inc.	Contact Chase Settle
Address 104 S. 4 th Street	Telephone No. 575-748-1471
Facility Name Mimosa Federal SWD #4	Facility Type Battery

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-26950
--------------------------	--------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	4	20S	24E	1980	South	810	East	Eddy

Latitude 32.59740 Longitude -104.59549
NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 15 B/PW	Volume Recovered 14 B/PW
Source of Release Produced Water	Date and Hour of Occurrence 03/09/2017; 12:00 PM	Date and Hour of Discovery 03/09/2017; 1:00 PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

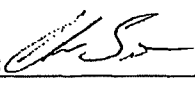
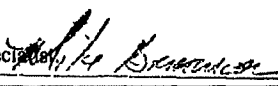
Describe Cause of Problem and Remedial Action Taken.*

Water legs on the produced water tanks were overflowing.

Describe Area Affected and Cleanup Action Taken.*

An approximate area of 65' X 23' was affected within the berm of the battery facility between the production tanks. Vacuum truck was called to remove standing fluid and a backhoe to excavate impacted soils. Excavated soils will be hauled to a NMOC approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. Depth to Ground Water: >100' (approximately 245', Section 4, T20S-R24E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC marked as "Final Report" 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, NMOC 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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Chase Settle	Approved by Environmental Specialist 	
Title: Safety & Environmental Rep II	Approval Date: <u>4/4/17</u>	Expiration Date: <u>N/A</u>
E-mail Address: Chase.Settle@eogresources.com	Conditions of Approval: 2RP- <u>See attached</u>	Attached ☒
Date: April 3, 2017	Phone: 575-748-1471	

* Attach Additional Sheets If Necessary

2RP-4162

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 22 2015

Form C-141
Revised August 8, 2011

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

State of New Mexico
Energy Minerals and Natural Resources

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

Submit 1 Copy to appropriate District Office in
conformance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

7AB1529550692 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	Contact Chase Settle
Address 104 S. 4 th Street	Telephone No. 575-748-1471
Facility Name Mimosa Federal SWD #1	Facility Type Battery

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-26449
--------------------------	--------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	4	20S	24E	1980	South	810	East	Eddy

Latitude 32.6011 Longitude -104.5869

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 7 B/O	Volume Recovered 6 B/O
Source of Release Failure of pumps to operate cause gun barrel to overflow.	Date and Hour of Occurrence 10/7/2015; AM	Date and Hour of Discovery 10/7/2015; AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

Pumps failed to operate causing the gun barrel to overflow and release crude oil. Valves were shut, vacuum truck(s) and roustabout crew called.

Describe Area Affected and Cleanup Action Taken.*

An approximate area of 150' X 15' with a pooling area of 60' X 35' was affected within the berm of the battery, with an additional area of 30' X 15' affected outside of the battery berm at the northeast corner. The oil mixed with rainwater that had collected in the berm in order to impact a larger area and overlap an area impacted by a previous release from the Mimosa Federal SWD #4. Vacuum trucks were called to recover any standing fluid. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX. If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. Depth to Ground Water: >100' (approximately 245', Section 4, T20S-R24E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS ZERO (0).

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" 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 a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>[Signature]</u>	OIL CONSERVATION DIVISION	
Printed Name: Chase Settle	Signed By: <u>[Signature]</u> Approved by Environmental Specialist:	
Title: NM Environmental Regulatory Agent	Approval Date: <u>10/22/15</u>	Expiration Date: <u>N/A</u>
E-mail Address: CSettle@yatespetroleum.com	Conditions of Approval:	
Date: October 22, 2015	Remediation per O.C.D. Rules & Guidelines Attached ☐	
Phone: 575-748-1217	SUBMIT REMEDIATION PROPOSAL NO	

LATER THAN: 11/23/15

2RP-335

* Attach Additional Sheets If Necessary

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 594962

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 594962
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	Received this information from operator regarding approval of remediation plan that was found to not be uploaded to the incident files associated images.	6/12/2026