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

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 17 2015
RECEIVED

State of New Mexico
Energy Minerals and Natural Resources

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

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

OPERATOR

Initial Report X Final Report

Name of Company Agave Energy Company	Contact Kerry Egan
Address 326 West Quay Artesia, NM 88210	Telephone No. 575 513-8988
Facility Name: Dagger ZW Pipeline ROW	Facility Type: Pipeline ROW

Surface Owner: R. Houghtaling	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	30	19S	25E					EDDY

Latitude 32.631487 **Longitude**-104.529270

NATURE OF RELEASE

Type of Release: Natural Gas, possibly pipeline liquids	Volume of Release: Approximately 5bbls of pipeline liquids	Volume Recovered: Approximately 5bbls
Source of Release: PVC Natural Gas and Produced Water lines	Date and Hour of Occurrence: 3/3/15 9:00AM	Date and Hour of Discovery: 3/3/15 9:00AM
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.*

During work on the 6" PVC water line, a release of pipeline liquids occurred, totaling less than 5 bbls. While continuing work on the project, evidence of a historic leak and resulting contamination was found. This leak is believed to have occurred due to buried dresser sleeves and or other connections on a section of 6" PVC gas line and the adjacent 6" PVC water line. This release of liquids occurred south of where the Dagger ZW tied into the main lines.

Further excavation showed the historic contamination to be due to a leaking 'T' connection where the Dagger ZW Battery connected to the main 6" PVC gas pipeline. The lateral connecting the Dagger ZW had previously been taken out of service, and a new poly line was installed to tie the battery into Agave's nearby steel gas line. The section of PVC gas line, both the main 6" gas line and the lateral that formerly tied in the Dagger ZW, lying above the contaminated soil was cut and removed. As such, this entire area of PVC gas line is now permanently out of service. The 6" PVC water line was replaced with a new poly line, with all valves now above grade.

Describe Area Affected and Cleanup Action Taken.*

The area affected by the release of pipeline liquids was approximately 3' x 12' within an excavation roughly 4'-6' below grade (i.e. pipeline depth). The liquids and affected soil were promptly recovered/excavated to prevent the spread of contamination, and disposed of.

Further excavation work showed the historic contamination to be localized around the previously mentioned 'T' connection in the gas line, with further contamination following the pipeline. Signs of contamination (grey and black soil, no free liquids or hydrocarbon odor) first became evident at around 4 feet in depth. Excavation showed contamination directly below the 'T' at a depth of 10 feet, and at depths of 6-8 feet at points north and south of the 'T'.

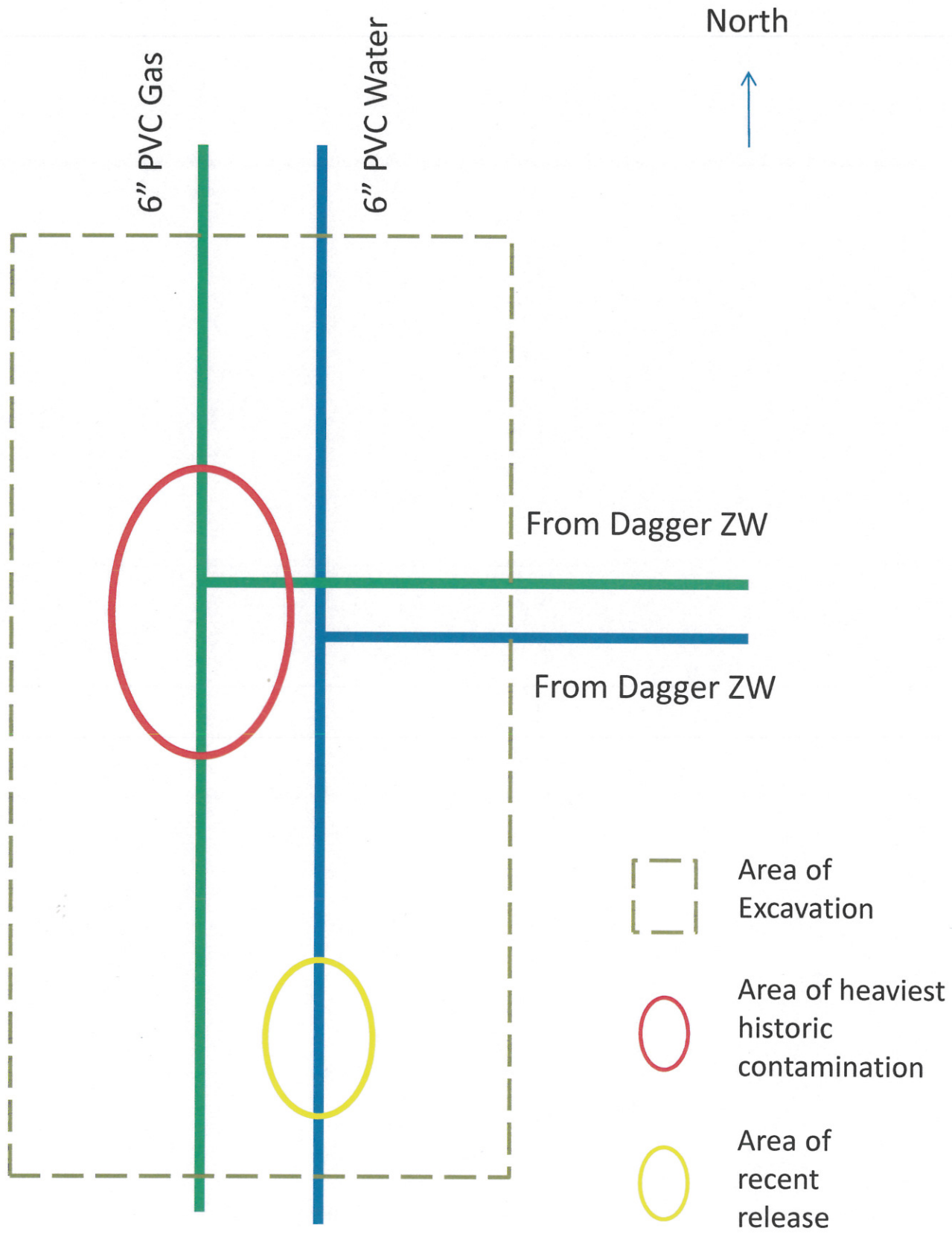
Initial samples of areas with the highest apparent contamination (i.e. highest degree of discoloration) to be below actionable levels as set forth in NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases* (August 13, 1993). As, such all soil showing discoloration was excavated to be remediated on site. The excavated material was laid out in wind-rows and repeatedly turned to encourage flashing.

To ensure removal of all contamination, Agave excavated an area approximately 18' in width, 30' in length, and 12' in depth. No apparently discolored soil was left in place. After the removal of all discolored soil, samples were collected from the bottom and sidewalls of the excavation, along with samples from the excavated material, to verify that there was no remaining contamination. Remediation attempts were successful in that all signs of discoloration in the excavated soil are no longer present. The attached sample results further verify that all contamination due to the recent release, and historic releases has been remediated to meet NMOCD's standards.

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: Kerry Egan	OIL CONSERVATION DIVISION	
Printed Name: Kerry Egan	Approved by Environmental Specialist:	
Title: Eng Tech	Approval Date:	Expiration Date:
E-mail Address: KEgan@yatespetroleum.com	Conditions of Approval:	Attached ☐
Date: 3/17/15 Phone: 575 748-4555		

* Attach Additional Sheets If Necessary


North
6" PVC Gas
6" PVC Water
From Dagger ZW
From Dagger ZW
Area of Excavation
Area of heaviest historic contamination
Area of recent release

Sampling Summary for: Dagger ZW Pipeline ROW

Analytical Report 1503502	Sample Date	Depth	BTEX (ppm)	GRO (ppm)	DRO (ppm)	Cl- (ppm)
ZW #1 (a)	3/10/2015	Composite sample, bottom of the trench north of the 'T' connection: 12 feet depth	ND	ND	ND	ND
ZW #1 (b)	3/10/2015	Composite sample, bottom of the trench south of the 'T' connection: 12 feet depth	ND	ND	ND	ND
ZW #2	3/10/2015	Composite sample, side walls north of 'T' connection: 6ft-12ft depth	ND	ND	ND	ND
ZW #3	3/10/2015	Composite sample, side walls south of 'T' connection: 6ft-12ft depth	ND	ND	ND	180
ZW #4	3/10/2015	Composite sample, excavated material from south side of 'T' connection	ND	ND	18	85
ZW #5	3/10/2015	Composite sample, excavated material from north side of 'T' connection	ND	ND	ND	ND

Site Ranking is zero (0). Average depth to ground water of nearest wells >100' (Approximately 195' per NMOSE)

Approximately 5 bbls of pipeline liquid released, historical contamination caused by unknown volume of natural gas. Discovered 3/3/15.

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 03942			ED	3	2	4	30	19S	25E	545141	3610277*	270	222	48
RA 04726			ED		3	2	19	19S	25E	544825	3612390*	390	310	80
RA 07832			ED		4	1	31	19S	25E	544438	3609170*	220	0	220
RA 08974			ED	4	2	4	31	19S	25E	545344	3608658*	270		
RA 10826			ED	4	2	4	31	19S	25E	545405	3608659	330	250	80
RA 11654 POD1			ED		3	2	19	19S	25E	544959	3612514	500		

Average Depth to Water: **195 feet**

Minimum Depth: **0 feet**

Maximum Depth: **310 feet**

Record Count: 6

PLSS Search:

Section(s): 19, 20, 29, 30, 31, 32 **Township:** 19S **Range:** 25E

***UTM location was derived from PLSS - see Help**

Analytical Report
Lab Order **1503502**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Project: Dagger ZW Spill
Lab ID: 1503502-001 **Matrix:** SOIL

Client Sample ID: ZW #1 (a)
Collection Date: 3/10/2015 10:45:00 AM
Received Date: 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/12/2015 2:30:28 PM
Surr: DNOP	110	63.5-128		%REC	1	3/12/2015 2:30:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2015 9:35:27 AM
Surr: BFB	92.7	80-120		%REC	1	3/13/2015 9:35:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	3/13/2015 9:35:27 AM
Benzene	ND	0.047		mg/Kg	1	3/13/2015 9:35:27 AM
Toluene	ND	0.047		mg/Kg	1	3/13/2015 9:35:27 AM
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2015 9:35:27 AM
Xylenes, Total	ND	0.094		mg/Kg	1	3/13/2015 9:35:27 AM
Surr: 4-Bromofluorobenzene	106	80-120		%REC	1	3/13/2015 9:35:27 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	ND	30		mg/Kg	20	3/12/2015 3:13:21 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Analytical Report
Lab Order **1503502**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Client Sample ID: ZW #1 (b)
Project: Dagger ZW Spill
Collection Date: 3/10/2015 11:00:00 AM
Lab ID: 1503502-002 **Matrix:** SOIL **Received Date:** 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/13/2015 9:09:41 AM
Surr: DNOP	105	63.5-128		%REC	1	3/13/2015 9:09:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/13/2015 10:04:13 AM
Surr: BFB	90.2	80-120		%REC	1	3/13/2015 10:04:13 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	3/13/2015 10:04:13 AM
Benzene	ND	0.048		mg/Kg	1	3/13/2015 10:04:13 AM
Toluene	ND	0.048		mg/Kg	1	3/13/2015 10:04:13 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/13/2015 10:04:13 AM
Xylenes, Total	ND	0.096		mg/Kg	1	3/13/2015 10:04:13 AM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	3/13/2015 10:04:13 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	ND	30		mg/Kg	20	3/12/2015 3:25:45 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Analytical Report
Lab Order **1503502**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Project: Dagger ZW Spill
Lab ID: 1503502-003 **Matrix:** SOIL

Client Sample ID: ZW #2
Collection Date: 3/10/2015 11:15:00 AM
Received Date: 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/13/2015 9:37:00 AM
Surr: DNOP	111	63.5-128		%REC	1	3/13/2015 9:37:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2015 10:32:54 AM
Surr: BFB	89.2	80-120		%REC	1	3/13/2015 10:32:54 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	3/13/2015 10:32:54 AM
Benzene	ND	0.049		mg/Kg	1	3/13/2015 10:32:54 AM
Toluene	ND	0.049		mg/Kg	1	3/13/2015 10:32:54 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2015 10:32:54 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/13/2015 10:32:54 AM
Surr: 4-Bromofluorobenzene	99.3	80-120		%REC	1	3/13/2015 10:32:54 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	ND	30		mg/Kg	20	3/12/2015 3:38:09 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Analytical Report
Lab Order **1503502**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Client Sample ID: ZW #3
Project: Dagger ZW Spill
Collection Date: 3/10/2015 2:00:00 PM
Lab ID: 1503502-004 **Matrix:** SOIL **Received Date:** 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/13/2015 11:53:24 AM
Surr: DNOP	114	63.5-128		%REC	1	3/13/2015 11:53:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2015 11:01:43 AM
Surr: BFB	92.3	80-120		%REC	1	3/13/2015 11:01:43 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	3/13/2015 11:01:43 AM
Benzene	ND	0.049		mg/Kg	1	3/13/2015 11:01:43 AM
Toluene	ND	0.049		mg/Kg	1	3/13/2015 11:01:43 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2015 11:01:43 AM
Xylenes, Total	ND	0.099		mg/Kg	1	3/13/2015 11:01:43 AM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	3/13/2015 11:01:43 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	180	30		mg/Kg	20	3/12/2015 3:50:34 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Analytical Report
Lab Order **1503502**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Project: Dagger ZW Spill
Lab ID: 1503502-005 **Matrix:** SOIL

Client Sample ID: ZW #4
Collection Date: 3/10/2015 2:30:00 PM
Received Date: 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	18	9.9		mg/Kg	1	3/13/2015 10:58:34 AM
Surr: DNOP	118	63.5-128		%REC	1	3/13/2015 10:58:34 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/13/2015 11:30:31 AM
Surr: BFB	96.9	80-120		%REC	1	3/13/2015 11:30:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	3/13/2015 11:30:31 AM
Benzene	ND	0.050		mg/Kg	1	3/13/2015 11:30:31 AM
Toluene	ND	0.050		mg/Kg	1	3/13/2015 11:30:31 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/13/2015 11:30:31 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/13/2015 11:30:31 AM
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	3/13/2015 11:30:31 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	85	30		mg/Kg	20	3/12/2015 4:02:59 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Agave Energy Company
Project: Dagger ZW Spill
Lab ID: 1503502-006 **Matrix:** SOIL

Client Sample ID: ZW #5
Collection Date: 3/10/2015 3:00:00 PM
Received Date: 3/12/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/13/2015 11:25:50 AM
Surr: DNOP	116	63.5-128		%REC	1	3/13/2015 11:25:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/13/2015 11:59:16 AM
Surr: BFB	91.3	80-120		%REC	1	3/13/2015 11:59:16 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	3/13/2015 11:59:16 AM
Benzene	ND	0.046		mg/Kg	1	3/13/2015 11:59:16 AM
Toluene	ND	0.046		mg/Kg	1	3/13/2015 11:59:16 AM
Ethylbenzene	ND	0.046		mg/Kg	1	3/13/2015 11:59:16 AM
Xylenes, Total	ND	0.092		mg/Kg	1	3/13/2015 11:59:16 AM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	3/13/2015 11:59:16 AM
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	ND	30		mg/Kg	20	3/12/2015 4:15:24 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit