

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Four Corners Exploration	OGRID 008090
Contact Name Kevin Smaka, Agent	Contact Telephone 505-325-1821 x1049
Contact email kevin.smaka@duganproduction.com	Incident # (assigned by OCD) NVF1820036683
Contact mailing address c/o Dugan Production Corp. PO Box 420, Farmington, NM 87499-0420	

Location of Release Source

Latitude 36.378546 Longitude -108.126871
(NAD 83 in decimal degrees to 5 decimal places)

Site Name South Bisti Federal 29 #1	Site Type
Date Release Discovered	API# (if applicable) 30-045-26730

Unit Letter	Section	Township	Range	County
A	29	25N	12W	San Juan

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

Nature and Volume of Release

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

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

Cause of Release

NMOC
APR 05 2019
DISTRICT III

31

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Kevin Smaka

Title: Regulatory Engineer Agent

Signature: [Signature]

Date: 4-4-2019

email: kevin.smaka@duganproduction.com

Telephone: 505-325-1821

OCD Only

Received by: OCD

Date: 4/5/19

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

Closure Approved by: [Signature]

Date: 4/9/19

Printed Name: Cory

Title: Environmental Spec.

South Bisti Federal 29 #1

30-045-26730

BGT Release Closure Report

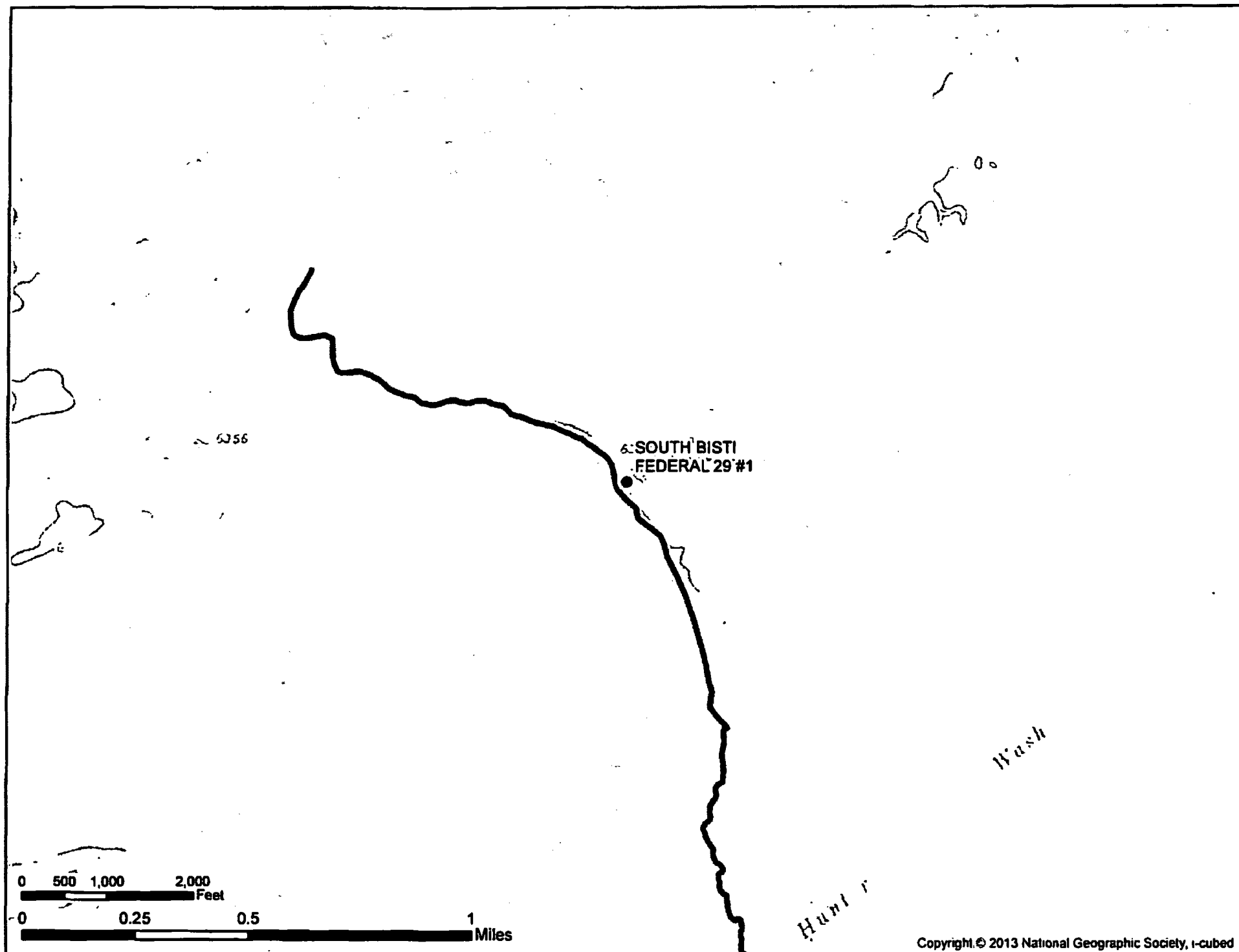
The South Bisti Federal 29 #1 is owned and operated by Four Corners exploration. Dugan Production Corp. provides pumping services for the well. The well was inspected by the NM OCD and they noted the BGT was buried by fill and sand. On 7-18-2018 Dugan, OCD inspectors and a contract crew witnessed the excavation of the side walls and bottom. As the bottom was reached there was an unplanned release in the pit. The release was caused by corrosion inside the BGT. A C-141 was filed and Dugan began coordinating with the well owner to determine the best course of action. The owner elected to remediate the spill via excavation and removal.

Weather delays and scheduling issues delayed the completion of remedial activities at the spill site. Beginning on March 18th, 2019 remediation and delineation activities began. First, test holes were dug 15 feet from the pit vault side walls in three of the 4 cardinal directions. The holes were dug to a depth of 15 feet and no contamination was detected. The east wall was left alone because a separator was resting above that wall and the operator desired the equipment be left in place if possible. Samples taken from that wall did not contain signs of contamination so we elected to not remove the equipment since that wall appeared to be clean.

The initial hole's size was roughly 20'x20'x10'. After removing all contaminated soils the hole grew to be 26'x31'x20'. Once Dugan was satisfied with the work that had been done the NMOCD and BLM were notified that samples would be taken, on March 28th, in the event the agency would like to witness the sampling. The samples came back within the allowable limits of the "spill rule" and the hole was back filled.

Included with this closure report are the following attachments.

1. A scaled site map
2. Sampling results
3. Sampling Diagram
4. Photographs of the BGT pit prior to back filling





(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 smallest to largest)

(NAD83 UTM in meters)

(In fact)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<u>SJ 00079</u>		SJ	SJ			4	13	25N	12W	225677	4032403° 	2550		
<u>SJ 01716</u>		SJ	SJ	2	3	01	25N	12W	225189	4035835° 	403		210	193

Maximum Depth: **210 feet**

Township: 25N Range: 12W

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

nmwrrs.cse.state.nm.us/nmwrrs/ReportProxy?queryData=%7B"report"%3A"waterColumn"%2C%0A"BasinDiv"%3A"true"%2C%0A"Basin"%3A""%2C... 1/1

Closure documents for South Bisti Federal 29 #1

The shaded area in the scaled site map represents the extents of the pit excavation.

The four side walls and the bottom were sampled as the diagram indicates.

Additionally it has been determined that groundwater most nearly exists at a depth of 400'. We arrived at this conclusion after searching the iWaters database, reviewing reference manuals and examining hydro-geologic reports for offsetting wells.

South Bisti Fed 29 #1

Scaled Site Map
BGT Release Remediation Site Map

Legend

36.3785324,-108.126915

Pit Area

Sampled well
Sampled well
Sampled well
Sampled well
Green hatching is pit area.

36.3785324,-108.126915

Google Earth


70 ft




South Bisti Federal 29 #1

BGT Release Site Map

Legend

 36.3785324,-108.126915

 36.3785324,-108.126915

Google Earth



100 ft



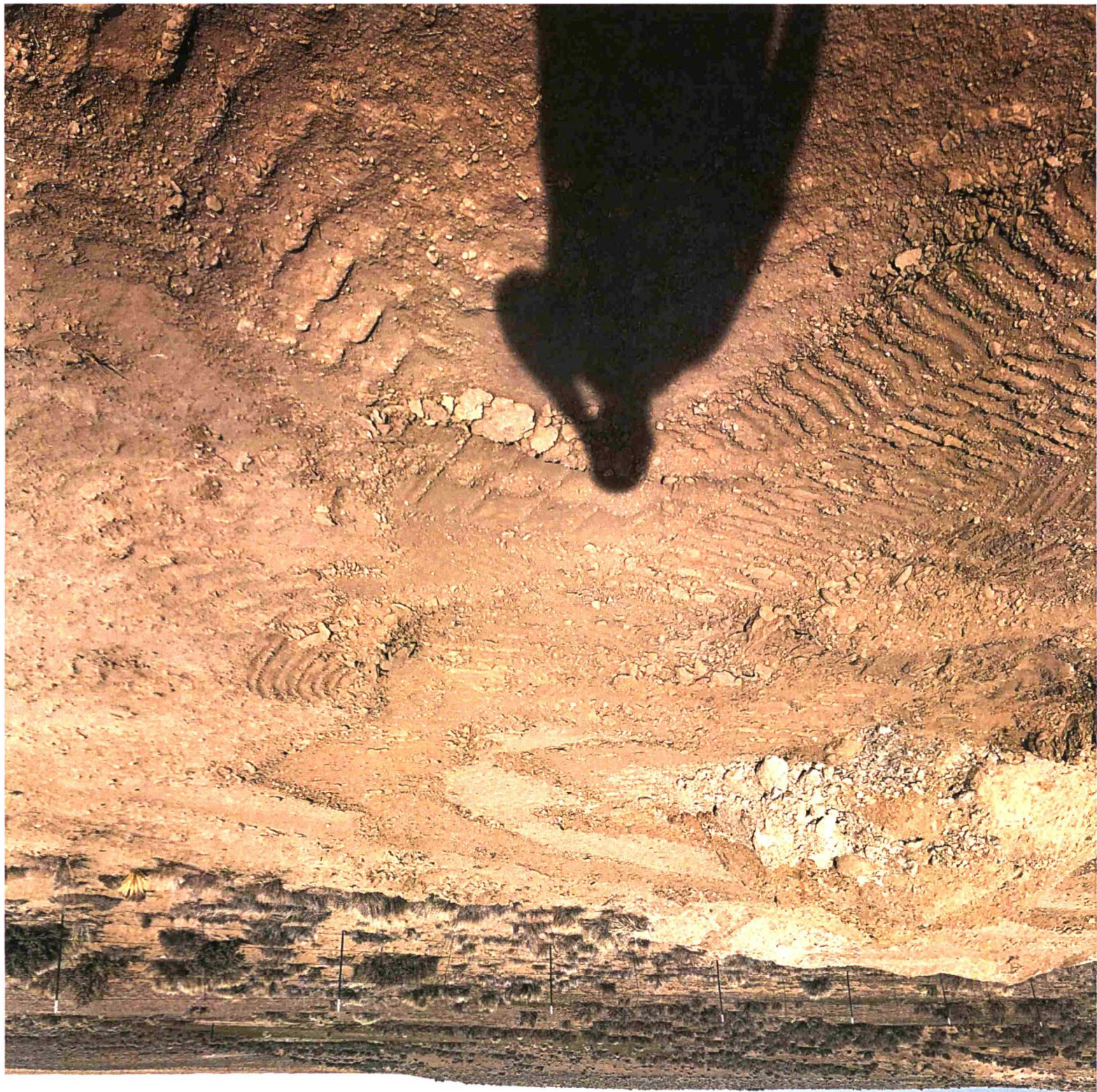
















Analytical Report

Report Summary

Client: Four Corners Exploration/Dugan Production

Samples Received: 3/28/2019

Job Number: 06094-0177

Work Order: P903075

Project Name/Location: South Bisti Fed 29 #1

Report Reviewed By:



Date: 4/2/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

Four Corners Exploration/Dugan Production
 4100 W Piedras St
 Farmington NM, 87499

Project Name: South Bisti Fed 29 #1
 Project Number: 06094-0177
 Project Manager: Mike Sandoval

Reported:
 04/02/19 17:25

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
South Bisti Fed 29 #1 #1	P903075-01A	Soil	03/28/19	03/28/19	Glass Jar, 4 oz.
South Bisti Fed 29 #1 #2	P903075-02A	Soil	03/28/19	03/28/19	Glass Jar, 4 oz.
South Bisti Fed 29 #1 #3	P903075-03A	Soil	03/28/19	03/28/19	Glass Jar, 4 oz.
South Bisti Fed 29 #1 #4	P903075-04A	Soil	03/28/19	03/28/19	Glass Jar, 4 oz.
South Bisti Fed 29 #1 #B	P903075-05A	Soil	03/28/19	03/28/19	Glass Jar, 4 oz.

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Four Corners Exploration/Dugan Production 4100 W Piedras St Farmington NM, 87499	Project Name: South Bisti Fed 29 #1 Project Number: 06094-0177 Project Manager: Mike Sandoval	Reported: 04/02/19 17:25
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**South Bisti Fed 29 #1 #1
P903075-01 (Solid)**

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Toluene-d8		100 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.8 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: n-Nonane		146 %		50-200	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Toluene-d8		100 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.8 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	48.1	20.0	mg/kg	1	1914002	04/01/19	04/01/19	EPA 300.0/9056A	
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Four Corners Exploration/Dugan Production
4100 W Piedras St
Farmington NM, 87499

Project Name: South Bisti Fed 29 #1
Project Number: 06094-0177
Project Manager: Mike Sandoval

Reported:
04/02/19 17:25

**South Bisti Fed 29 #1 #2
P903075-02 (Solid)**

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		95.4 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Toluene-d8		99.2 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Bromofluorobenzene		99.1 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8015D	
Diesel Range Organics (C10-C28)	49.2	25.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: n-Nonane		109 %		50-200	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		95.4 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Toluene-d8		99.2 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Bromofluorobenzene		99.1 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	214	20.0	mg/kg	1	1914002	04/01/19	04/01/19	EPA 300.0/9056A	
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Four Corners Exploration/Dugan Production 4100 W Piedras St Farmington NM, 87499	Project Name: South Bisti Fed 29 #1 Project Number: 06094-0177 Project Manager: Mike Sandoval	Reported: 04/02/19 17:25
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**South Bisti Fed 29 #1 #3
P903075-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		97.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Toluene-d8		99.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8015D	
Diesel Range Organics (C10-C28)	98.8	25.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: n-Nonane		106 %		50-200	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		97.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Toluene-d8		99.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.6 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	318	20.0	mg/kg	1	1914002	04/01/19	04/01/19	EPA 300.0/9056A	
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Four Corners Exploration/Dugan Production
 4100 W Piedras St
 Farmington NM, 87499

 Project Name: South Bisti Fed 29 #1
 Project Number: 06094-0177
 Project Manager: Mike Sandoval

 Reported:
 04/02/19 17:25

South Bisti Fed 29 #1 #4
P903075-04 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		96.4 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Toluene-d8		99.8 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.0 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: n-Nonane		103 %		50-200	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		96.4 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Toluene-d8		99.8 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.0 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	377	20.0	mg/kg	1	1914002	04/01/19	04/01/19	EPA 300.0/9056A	
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Four Corners Exploration/Dugan Production
 4100 W Piedras St
 Farmington NM, 87499

 Project Name: South Bisti Fed 29 #1
 Project Number: 06094-0177
 Project Manager: Mike Sandoval

Reported:
 04/02/19 17:25

South Bisti Fed 29 #1 #B
P903075-05 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		93.9 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Toluene-d8		99.9 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	
Surrogate: Bromofluorobenzene		100 %		70-130	1914003	04/01/19	04/02/19	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1914003	04/01/19	04/02/19	EPA 8015D	
Diesel Range Organics (C10-C28)	99.6	25.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: n-Nonane		99.9 %		50-200	1913043	04/01/19	04/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		93.9 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Toluene-d8		99.9 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	
Surrogate: Bromofluorobenzene		100 %		70-130	1914003	04/01/19	04/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	314	20.0	mg/kg	1	1914002	04/01/19	04/01/19	EPA 300.0/9056A	
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Four Corners Exploration/Dugan Production
4100 W Piedras St
Farmington NM, 87499

Project Name: South Bisti Fed 29 #1
Project Number: 06094-0177
Project Manager: Mike Sandoval

Reported:
04/02/19 17:25

Volatile Organic Compounds by 8260 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1914003 - Purge and Trap EPA 5030A

Blank (1914003-BLK1)

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 1,2-Dichloroethane-d4	0.498		"	0.500		99.6	70-130			
Surrogate: Toluene-d8	0.505		"	0.500		101	70-130			
Surrogate: Bromofluorobenzene	0.487		"	0.500		97.3	70-130			

LCS (1914003-BS1)

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Benzene	2.49	0.0250	mg/kg	2.50		99.7	70-130			
Toluene	2.46	0.0250	"	2.50		98.2	70-130			
Ethylbenzene	2.41	0.0250	"	2.50		96.4	70-130			
p,m-Xylene	4.71	0.0500	"	5.00		94.1	70-130			
o-Xylene	2.34	0.0250	"	2.50		93.6	70-130			
Total Xylenes	7.05	0.0250	"	7.50		94.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		"	0.500		99.6	70-130			
Surrogate: Toluene-d8	0.509		"	0.500		102	70-130			
Surrogate: Bromofluorobenzene	0.483		"	0.500		96.6	70-130			

Matrix Spike (1914003-MS1)

Source: P903075-01

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Benzene	2.54	0.0250	mg/kg	2.50	ND	101	48-131			
Toluene	2.48	0.0250	"	2.50	ND	99.1	48-130			
Ethylbenzene	2.45	0.0250	"	2.50	ND	98.0	45-135			
p,m-Xylene	4.78	0.0500	"	5.00	ND	95.7	43-135			
o-Xylene	2.38	0.0250	"	2.50	ND	95.4	43-135			
Total Xylenes	7.17	0.0250	"	7.50	ND	95.6	43-135			
Surrogate: 1,2-Dichloroethane-d4	0.503		"	0.500		101	70-130			
Surrogate: Toluene-d8	0.501		"	0.500		100	70-130			
Surrogate: Bromofluorobenzene	0.495		"	0.500		98.9	70-130			

Matrix Spike Dup (1914003-MSD1)

Source: P903075-01

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Benzene	2.54	0.0250	mg/kg	2.50	ND	101	48-131	0.0394	23	
Toluene	2.47	0.0250	"	2.50	ND	98.8	48-130	0.283	24	
Ethylbenzene	2.44	0.0250	"	2.50	ND	97.7	45-135	0.327	27	
p,m-Xylene	4.77	0.0500	"	5.00	ND	95.4	43-135	0.314	27	
o-Xylene	2.38	0.0250	"	2.50	ND	95.3	43-135	0.0629	27	
Total Xylenes	7.15	0.0250	"	7.50	ND	95.3	43-135	0.230	27	
Surrogate: 1,2-Dichloroethane-d4	0.511		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.502		"	0.500		100	70-130			

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5796 Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

24 Hour Emergency Response Phone (800) 362-1879

envirotech-inc.com

Labadmin@envirotech-inc.com

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Four Corners Exploration/Dugan Production
 4100 W Piedras St
 Farmington NM, 87499

Project Name: South Bisti Fed 29 #1
 Project Number: 06094-0177
 Project Manager: Mike Sandoval

Reported:
 04/02/19 17:25

Volatile Organic Compounds by 8260 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1914003 - Purge and Trap EPA 5030A

Matrix Spike Dup (1914003-MSD1)

Source: P903075-01

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Surrogate: Bromofluorobenzene	0.500	mg/kg	0.500	99.9	70-130
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Four Corners Exploration/Dugan Production	Project Name:	South Bisti Fed 29 #1	Reported: 04/02/19 17:25
4100 W Piedras St	Project Number:	06094-0177	
Farmington NM, 87499	Project Manager:	Mike Sandoval	

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1913043 - DRO Extraction EPA 3570

Blank (1913043-BLK1)

Prepared & Analyzed: 04/01/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	58.7		"	50.0		117	50-200			

LCS (1913043-BS1)

Prepared & Analyzed: 04/01/19 1

Diesel Range Organics (C10-C28)	468	25.0	mg/kg	500		93.6	38-132			
Surrogate: n-Nonane	48.4		"	50.0		96.9	50-200			

Matrix Spike (1913043-MS1)

Source: P903075-05

Prepared & Analyzed: 04/01/19 1

Diesel Range Organics (C10-C28)	553	25.0	mg/kg	500	99.6	90.7	38-132			
Surrogate: n-Nonane	45.3		"	50.0		90.6	50-200			

Matrix Spike Dup (1913043-MSD1)

Source: P903075-05

Prepared & Analyzed: 04/01/19 1

Diesel Range Organics (C10-C28)	569	25.0	mg/kg	500	99.6	93.8	38-132	2.83	20	
Surrogate: n-Nonane	48.1		"	50.0		96.2	50-200			

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Four Corners Exploration/Dugan Production
 4100 W Piedras St
 Farmington NM, 87499

 Project Name: South Bisti Fed 29 #1
 Project Number: 06094-0177
 Project Manager: Mike Sandoval

 Reported:
 04/02/19 17:25

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1914003 - Purge and Trap EPA 5030A

Blank (1914003-BLK1)

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.498		"	0.500		99.6	70-130			
Surrogate: Toluene-d8	0.505		"	0.500		101	70-130			
Surrogate: Bromofluorobenzene	0.487		"	0.500		97.3	70-130			

LCS (1914003-BS2)

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Gasoline Range Organics (C6-C10)	48.3	20.0	mg/kg	50.0		96.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		"	0.500		99.7	70-130			
Surrogate: Toluene-d8	0.502		"	0.500		100	70-130			
Surrogate: Bromofluorobenzene	0.483		"	0.500		96.6	70-130			

Matrix Spike (1914003-MS2)

Source: P903075-01

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Gasoline Range Organics (C6-C10)	46.2	20.0	mg/kg	50.0	ND	92.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.507		"	0.500		101	70-130			
Surrogate: Toluene-d8	0.497		"	0.500		99.4	70-130			
Surrogate: Bromofluorobenzene	0.496		"	0.500		99.1	70-130			

Matrix Spike Dup (1914003-MSD2)

Source: P903075-01

Prepared: 04/01/19 1 Analyzed: 04/02/19 1

Gasoline Range Organics (C6-C10)	50.7	20.0	mg/kg	50.0	ND	101	70-130	9.25	20	
Surrogate: 1,2-Dichloroethane-d4	0.495		"	0.500		98.9	70-130			
Surrogate: Toluene-d8	0.505		"	0.500		101	70-130			
Surrogate: Bromofluorobenzene	0.493		"	0.500		98.5	70-130			

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Four Corners Exploration/Dugan Production	Project Name:	South Bisti Fed 29 #1	Reported: 04/02/19 17:25
4100 W Piedras St	Project Number:	06094-0177	
Farmington NM, 87499	Project Manager:	Mike Sandoval	

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1914002 - Anion Extraction EPA 300.0/9056A										
Blank (1914002-BLK1)				Prepared: 04/01/19 0 Analyzed: 04/01/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1914002-BS1)				Prepared: 04/01/19 0 Analyzed: 04/01/19 1						
Chloride	256	20.0	mg/kg	250		102	90-110			
Matrix Spike (1914002-MS1)				Source: P903075-01		Prepared: 04/01/19 0 Analyzed: 04/01/19 1				
Chloride	295	20.0	mg/kg	250	48.1	98.6	80-120			
Matrix Spike Dup (1914002-MSD1)				Source: P903075-01		Prepared: 04/01/19 0 Analyzed: 04/01/19 1				
Chloride	295	20.0	mg/kg	250	48.1	98.7	80-120	0.0543	20	

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Four Corners Exploration/Dugan Production
4100 W Piedras St
Farmington NM, 87499

Project Name: South Bisti Fed 29 #1
Project Number: 06094-0177
Project Manager: Mike Sandoval

Reported:
04/02/19 17:25

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
RPD Relative Percent Difference
** Methods marked with ** are non-accredited methods.

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Client: <u>Four Corners Exploration/Dugan Production</u>		Report Attention		Lab Use Only		TAT		EPA Program				
Project: <u>South Bisti Fed 29#1</u>		Report due by:		Lab WO# <u>P903075</u>		Job Number <u>06094-0177</u>		1D	3D	RCRA	CWA	SDWA
Project Manager: <u>Michael Sandoval</u>		Attention:										
Address:		Address:						Analysis and Method			State	
City, State, Zip		City, State, Zip									NM CO UT AZ	
Phone: <u>330-0929</u>		Phone:									X	
Email: <u>Mike.Sandoval@DuganProduction.com</u>		Email:										

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
10:30	3-28-19	S	1	South Bisti Fed 29#1 #1	1								
10:40		S	1	- - - - - #2	2								
10:50		S	1	- - - - - #3	3								
11:00		S	1	- - - - - #4	4								
11:10		S	1	- - - - - #5	5								

Additional Instructions:

Bill Dugan Production sent 3/29/19

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Michael Sandoval

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) <u>Michael Sandoval</u>	Date <u>3-29-19</u>	Time <u>4:40</u>	Received by: (Signature) <u>Rain Lopez</u>	Date <u>3-29-19</u>	Time <u>4:40pm</u>	Lab Use Only
Relinquished by: (Signature)	Date <u>3-28-19</u>	Time <u>RL</u>	Received by: (Signature)	Date <u>3-28-19</u>	Time <u>RL</u>	Received on ice: <u>0</u> / N
						T1
						T2
						T3
						AVG Temp °C <u>4</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.