Inspection Report For Well: UT20736 - 04233

U.S. Environmental Protection Agency
Underground Injection Control Program, 8ENF-T
999 18th Street, Suite 300, Denver, CO 80202-2466

This form was printed on 9/24/2013

INSPECTOR(S): Lead: Roberts, Sarah — Date: ~~10~~ 12/10/2013

Others: Ajayi, Christopher — Time: 1:03 am / pm

OPERATOR (only if different): _____

REPRESENTATIVE(S): Chad Stevinson

PRE-INSPECTION REVIEW

Petroglyph Operating Company, Inc

Well Name:	Ute Tribal 29-09 (old 1-29)		
Well Type:	Enhanced Recovery (2R)		
Operating Status:	AC (ACTIVE) as of 12/31/2002		
Oil Field:	Antelope Creek (Duchesne)		
Location:	NESE S29 T5S R3W		
Indian Country:	X, Uintah and Ouray		
Last Inspection:	8/28/2012	***Allowable Inj Pressure:***	1900 /
Last MIT:	Pass 2/11/2011	***Annulus Pressure From Last MIT:***	1050

BLACK = POSSIBLE VIOLATION GREY = DATA MISSING

INSPECTION TYPE: (Select One)

- [ ] Construction / Workover
- [ ] Plugging
- [ ] Post-Closure
- [ ] Response to Complaint
- [x] Routine
- [ ] Witness MIT
- [ ] Other

ICIS Entered
Date 12/27/13
Initials DB

OBSERVED VALUES:

Tubing Gauge:	[x] Yes [ ] No	Pressure: U: 1868 / L: ____ psig Gauge Range: Scada psig	Gauge Owner:	[ ] EPA [x] Operator
Annulus Gauge:	[x] Yes [ ] No	Pressure: 0 psig Gauge Range: opened psig	Gauge Owner:	[x] EPA [ ] Operator
Bradenhead Gauge:	[ ] Yes [ ] No	Pressure: ____ psig Gauge Range: ____ psig	Gauge Owner:	[ ] EPA [ ] Operator
Pump Gauge:	[ ] Yes [ ] No	Pressure: ____ psig Gauge Range: ____ psig	Gauge Owner:	[ ] EPA [ ] Operator

Operating Status: (Select One)
- [x] Active
- [ ] Being Reworked
- [ ] Not Injecting
- [ ] Production
- [ ] Plugged and Abandoned
- [ ] Under Construction

GREEN	BLUE	CBI
	1	

TAB

See page 2 for photos, comments, and site conditions.

U2 Entered
Date 12/17/13
Initial SR

Inspection Report For Well: UT20736 - 04233 (PAGE 2)

PHOTOGRAPHS: ☐ Yes ☒ No List of photos taken: _____

Comments and site conditions observed during inspection: _____

GPS: GPS File ID: _____

Signature of EPA Inspector(s): _____ _____ _____

☐ Data Entry ☐ Compliance Staff ☐ Hard Copy Filing

NOTICE OF INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII, 999 18TH STREET - SUITE 500
DENVER, COLORADO 80202-2405

Date: 12/16/13
Hour: 8:00a

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Firm Name: Petrochyph Operating, Inc.

Firm Address: Roosevelt, UT, Antelope Creek Oil Field

REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Sarah Roberts
Inspector's Name & Title (Print)

Inspector's Signature

EPA R8 3560-1 (8-89)

Original - Regional Office Copy
Yellow Copy - Operator Copy

OMB No. 2040-0042 Approval Expires 11/30/2014

EPA

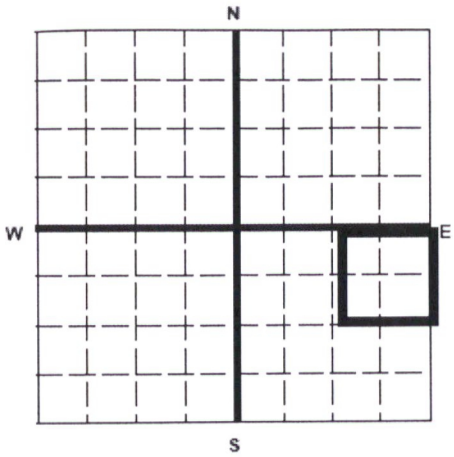
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah, 84026

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	Duchesne	UT2736-04233

Surface Location Description
___ 1/4 of ___ 1/4 of NE 1/4 of SE 1/4 of Section 29 Township 5S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 1324 ft. frm (N/S) S Line of quarter section
and 1160 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY
- [ ] Brine Disposal
- [X] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [ ] Individual
- [X] Area

Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 29-09

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	16	1765	1789	205		0	0
February	16	1825	1853	655		0	0
March	16	1831	1839	772		0	0
April	16	1806	1833	652		0	0
May	16	1823	1842	780		0	0
June	16	1803	1856	604		0	0
July	16	1811	1829	625		0	0
August	16	1796	1835	583		0	0
September	16	1776	1805	505		0	0
October	16	1800	1811	772		0	0
November	16	1730	1785	416		0	0
December	16	1765	1787	654		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		03/21/2017

GREEN BLUE CBI TAB 2

UIC Entered
Date 4/6/17
Initial DB

EPA Form 7520-11 (Rev. 12-11)

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

multi-chem
A HALLIBURTON SERVICE

Units of Measurement: **Standard**

Water Analysis Report

Production Company:	**PETROGLYPH OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-09 INJ, DUCHESNE**	Lab Tech:	**Michele Pike**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2017**		
Sample ID:	**WA-345357**		

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics

Test Date:	1/25/2017
System Temperature 1 (°F):	300
System Pressure 1 (psig):	2000
System Temperature 2 (°F):	130
System Pressure 2 (psig):	50
Calculated Density (g/ml):	0.9983
pH:	7.30
Calculated TDS (mg/L):	1572.32
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	59.00
H_2S in Gas (%):	
H2S in Water (mg/L):	0.00
Tot. SuspendedSolids(mg/L):	
Corrosivity(LanglierSat.Indx)	0.00
Alkalinity:	

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	228.84	Chloride (Cl):	233.00
Potassium (K):	80.72	Sulfate (SO_4):	90.00
Magnesium (Mg):	23.41	Bicarbonate (HCO_3):	732.00
Calcium (Ca):	44.93	Carbonate (CO_3):	
Strontium (Sr):	1.76	Hydroxide(HO):	
Barium (Ba):	2.09	Acetic Acid (CH_3COO)	
Iron (Fe):	77.06	Propionic Acid (C_2H_5COO)	
Zinc (Zn):	45.77	Butanoic Acid (C_3H_7COO)	
Lead (Pb):	1.33	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Ammonia NH_3:		Fluoride (F):	
Manganese (Mn):	0.33	Bromine (Br):	
Aluminum (Al):	0.38	Silica (SiO_2):	11.08
Lithium (Li):	9.63	Calcium Carbonate ($CaCO_3$):	
Boron (B):	13.91	Phosphates (PO_4):	45.61
Silicon (Si):	5.18	Oxygen (O_2):	

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.47	17.86	1.10	1.15	0.00	0.00	2.75	55.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149.00	267.00	0.55	20.41	1.01	1.12	0.00	0.00	2.87	55.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168.00	483.00	0.68	24.02	0.94	1.10	0.00	0.00	3.03	55.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187.00	700.00	0.82	27.35	0.89	1.08	0.00	0.00	3.18	55.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206.00	917.00	0.97	30.27	0.86	1.07	0.00	0.00	3.33	55.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224.00	1133.00	1.13	32.70	0.84	1.07	0.00	0.00	3.48	55.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
243.00	1350.00	1.29	34.63	0.84	1.06	0.00	0.00	3.62	55.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
262.00	1567.00	1.46	36.08	0.85	1.07	0.00	0.00	3.76	56.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
281.00	1783.00	1.64	37.14	0.87	1.08	0.00	0.00	3.89	56.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	2000.00	1.82	37.88	0.90	1.09	0.00	0.00	4.02	56.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

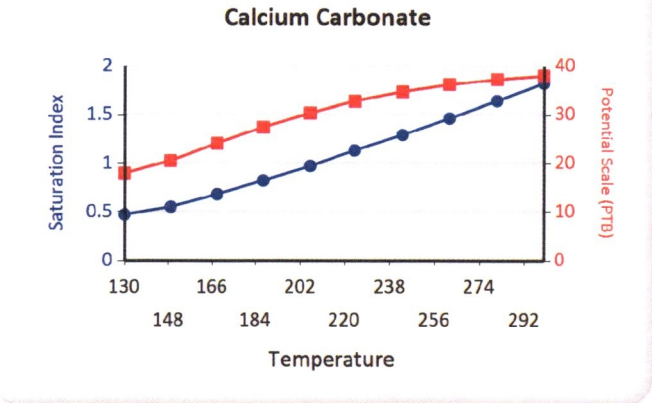
multi-chem®
A HALLIBURTON SERVICE

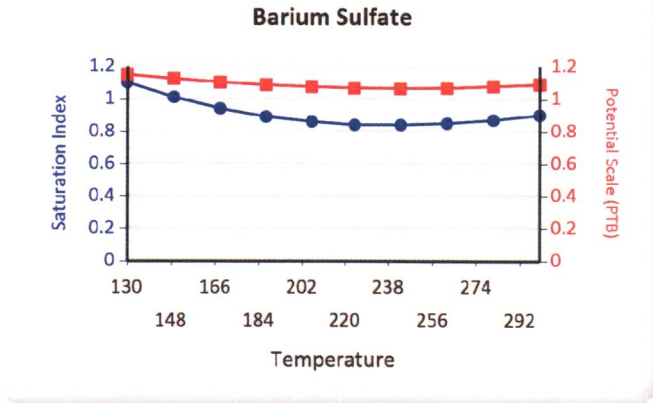
Water Analysis Report

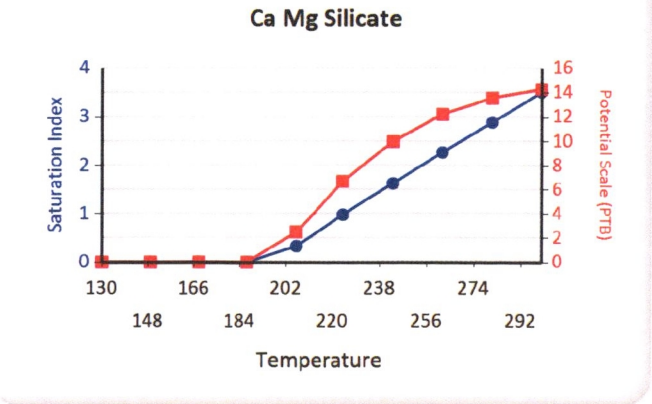
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	30.48	0.00	0.00	0.00	0.00	0.00	0.00	7.37	25.60
149.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	2.52	30.60	0.00	0.00	0.00	0.00	0.00	0.00	7.96	25.65
168.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	2.78	30.68	0.00	0.00	0.00	0.00	0.00	0.00	8.80	25.68
187.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	30.72	0.00	0.00	0.99	7.18	0.00	0.00	9.65	25.70
206.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	3.23	30.74	0.00	0.00	2.07	14.40	0.33	2.46	10.52	25.70
224.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	30.75	0.00	0.00	3.14	20.39	0.98	6.67	11.40	25.70
243.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	30.76	0.00	0.00	4.20	24.65	1.63	9.97	12.28	25.70
262.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	30.76	0.00	0.00	5.23	27.10	2.27	12.21	13.16	25.70
281.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96	30.77	0.00	0.00	6.24	28.18	2.89	13.55	14.02	25.70
300.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	30.77	0.00	0.00	7.23	28.56	3.51	14.26	14.87	25.70

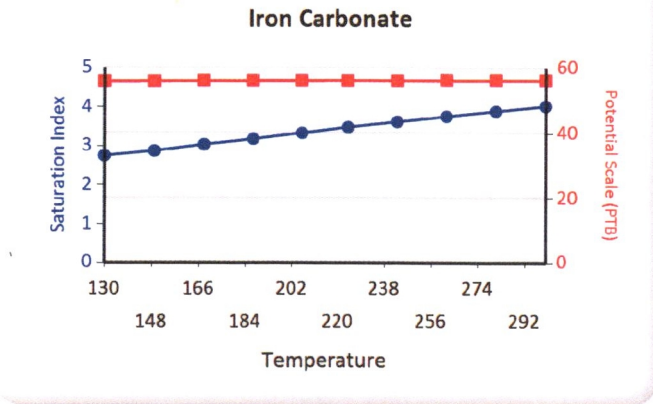
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Fe Silicate

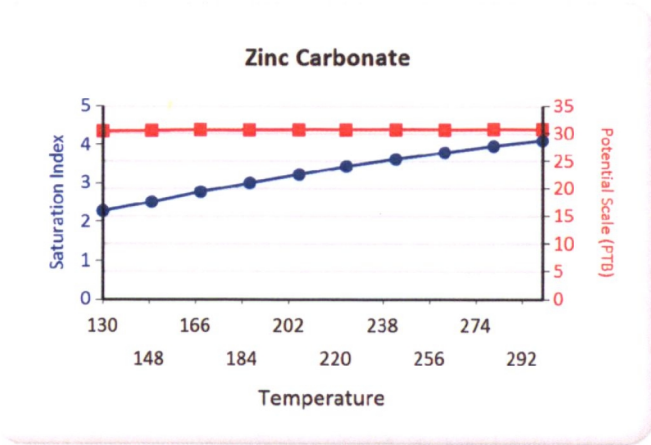
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

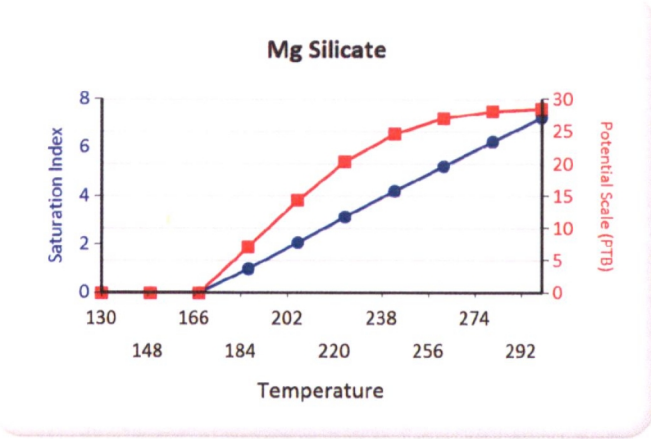


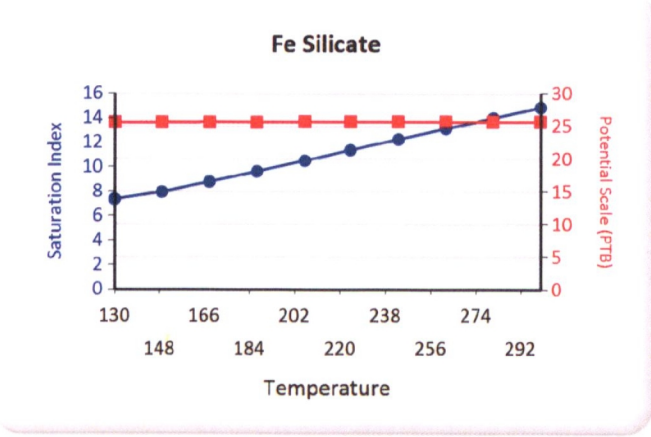







Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
130
148
166
184
202
220
238
256
274
292


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
130
148
166
184
202
220
238
256
274
292


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
130
148
166
184
202
220
238
256
274
292

OMB No. 2040-0042 Approval Expires 11/30/2014

EPA

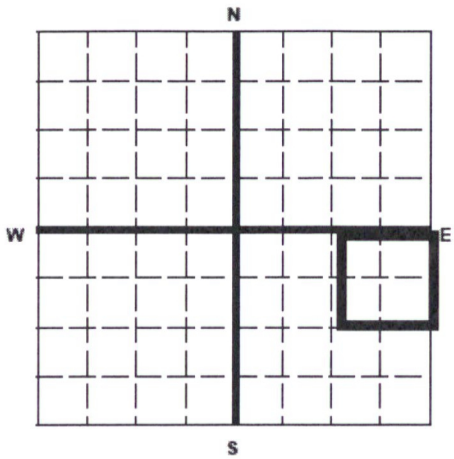
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah, 84026

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	Duchesne	UT2736-~~04434~~ 04233

Surface Location Description
___ 1/4 of ___ 1/4 of NE 1/4 of SE 1/4 of Section 29 Township 5S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 1324 ft. frm (N/S) S Line of quarter section
and 1160 ft. from (E/W) E Line of quarter section.

U2 Entered
Date 3/3/16
Initial DB

WELL ACTIVITY
- [ ] Brine Disposal
- [X] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [ ] Individual
- [X] Area

Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 29-09

MONTH	YEAR	INJECTION PRESSURE AVERAGE PSIG	INJECTION PRESSURE MAXIMUM PSIG	TOTAL VOLUME INJECTED BBL	TOTAL VOLUME INJECTED MCF	TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MINIMUM PSIG	TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MAXIMUM PSIG
January	15	1757	1805	394		0	0
February	15	1796	1844	441		0	0
March	15	1822	1850	599		0	0
April	15	1793	1839	499		0	0
May	15	1815	1829	521		0	0
June	15	1823	1848	464		0	0
July	15	1842	1853	431		0	0
August	15	1827	1841	423		0	0
September	15	1801	1830	291		0	0
October	15	1817	1818	395		0	0
November	15	1826	1834	426		0	0
December	15	1818	1833	464		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		02/08/2016

TAB	GREEN	BLUE	CBI
		2	

EPA Form 7520-11 (Rev. 12-11)

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

multi-chem®
A HALLIBURTON SERVICE

Units of Measurement: **Standard**

Water Analysis Report

Production Company:	**PETROGLYPH OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-09 INJ, DUCHESNE**	Lab Tech:	**Michele Pike**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2016**		
Sample ID:	**WA-327709**		

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics

Test Date:	**1/13/2016**
System Temperature 1 (°F):	**60**
System Pressure 1 (psig):	**2000**
System Temperature 2 (°F):	**180**
System Pressure 2 (psig):	**20**
Calculated Density (g/ml):	**1.0021**
pH:	**7.50**
Calculated TDS (mg/L):	**6939.94**
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	**100.00**
H_2S in Gas (%):	
H2S in Water (mg/L):	**0.00**
Tot. SuspendedSolids(mg/L):	
Corrosivity(LanglierSat.Indx)	**0.00**
Alkalinity:	

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	**2183.84**	Chloride (Cl):	**3000.00**
Potassium (K):	**5.59**	Sulfate (SO_4):	**480.00**
Magnesium (Mg):	**74.20**	Bicarbonate (HCO_3):	**976.00**
Calcium (Ca):	**182.18**	Carbonate (CO_3):	
Strontium (Sr):	**5.45**	Acetic Acid (CH_3COO)	
Barium (Ba):	**1.22**	Propionic Acid (C_2H_5COO)	
Iron (Fe):	**2.68**	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	**0.99**	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	**0.60**	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	**0.06**	Silica (SiO_2):	**27.13**
Aluminum (Al):	**0.11**	Calcium Carbonate ($CaCO_3$):	
Lithium (Li):	**0.57**	Phosphates (PO_4):	**4.20**
Boron (B):	**0.41**	Oxygen (O_2):	
Silicon (Si):	**12.68**		

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	**PSI**	**SI**	**PTB**	SI	**PTB**	**SI**	**PTB**	**SI**	**PTB**	**SI**	**PTB**	**SI**	**PTB**	**SI**	**PTB**	**SI**	**PTB**
180.00	20.00	1.54	112.10	0.90	0.63	0.00	0.00	1.84	1.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	240.00	1.30	93.28	0.92	0.64	0.00	0.00	1.58	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	460.00	1.19	85.73	0.95	0.64	0.00	0.00	1.45	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	680.00	1.09	78.27	0.99	0.65	0.00	0.00	1.32	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.00	900.00	1.00	71.04	1.04	0.66	0.00	0.00	1.19	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	1120.00	0.91	64.15	1.11	0.67	0.00	0.00	1.07	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1340.00	0.83	57.67	1.18	0.68	0.00	0.00	0.94	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	1560.00	0.76	51.71	1.27	0.69	0.00	0.00	0.82	1.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1780.00	0.69	46.30	1.38	0.70	0.00	0.00	0.70	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	2000.00	0.63	41.49	1.51	0.70	0.00	0.00	0.58	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

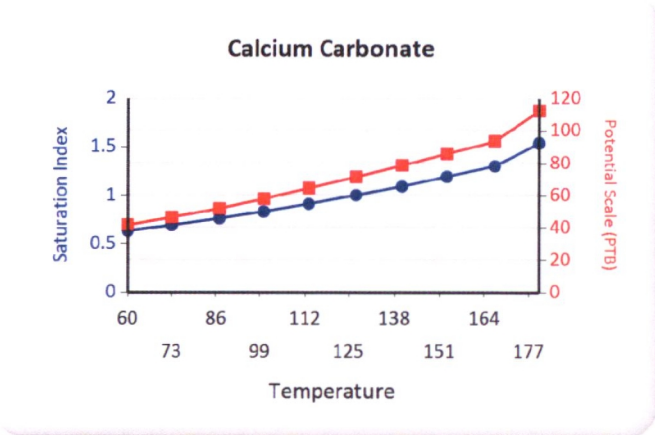
multi-chem®
A HALLIBURTON SERVICE

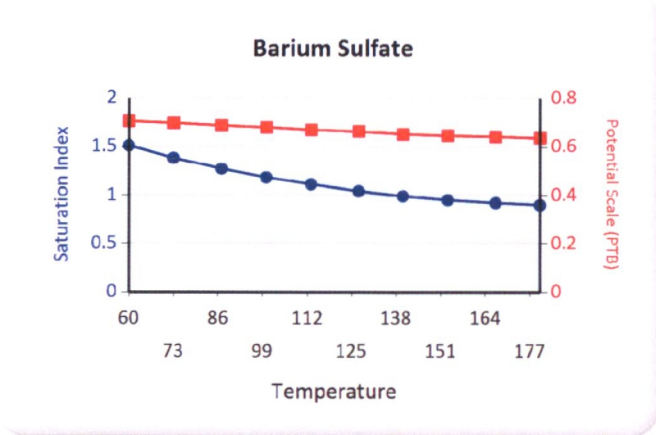
Water Analysis Report

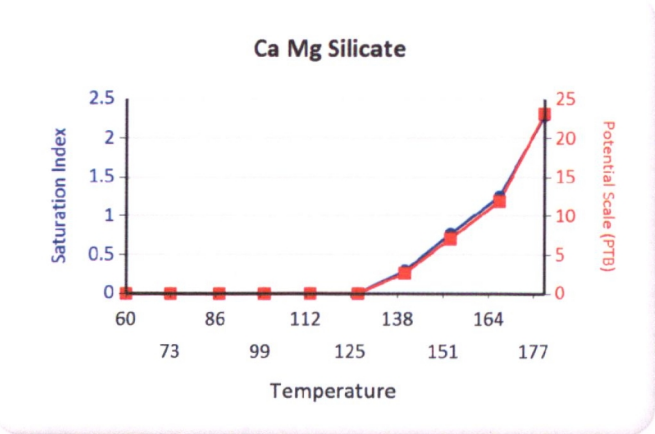
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.64	0.00	0.00	4.33	47.05	2.29	23.17	7.17	2.08
167.00	240.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.61	0.00	0.00	2.69	26.16	1.25	11.95	5.68	2.05
153.00	460.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.58	0.00	0.00	1.89	17.33	0.77	7.12	5.05	2.03
140.00	680.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.53	0.00	0.00	1.09	9.36	0.29	2.63	4.43	2.00
127.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.45	0.00	0.00	0.30	2.40	0.00	0.00	3.82	1.95
113.00	1120.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.30	0.00	0.00	0.00	0.00	0.00	0.00	3.22	1.87
100.00	1340.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.63	1.75
87.00	1560.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06	1.58
73.00	1780.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51	1.33
60.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.98

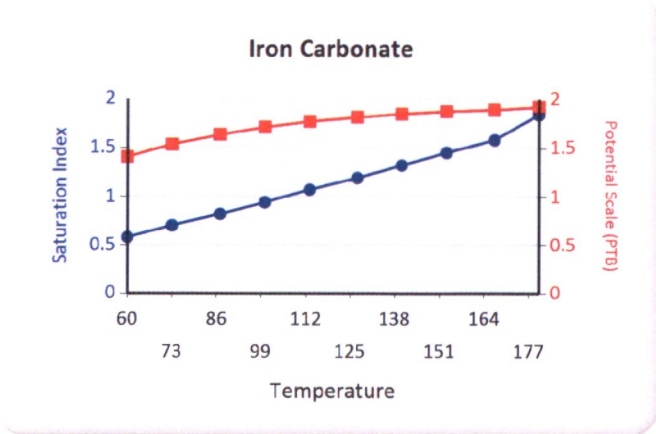
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

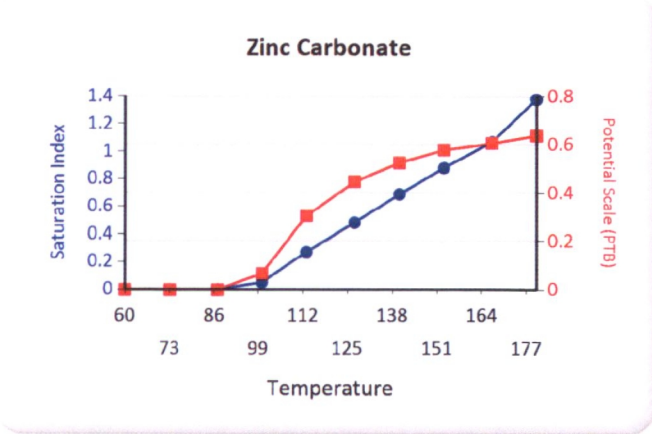
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Fe Silicate

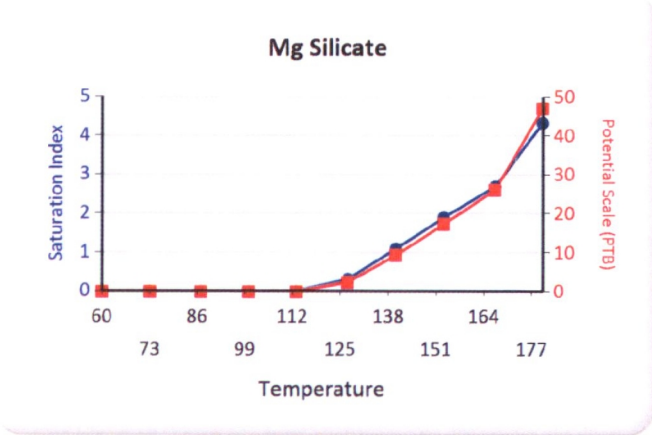


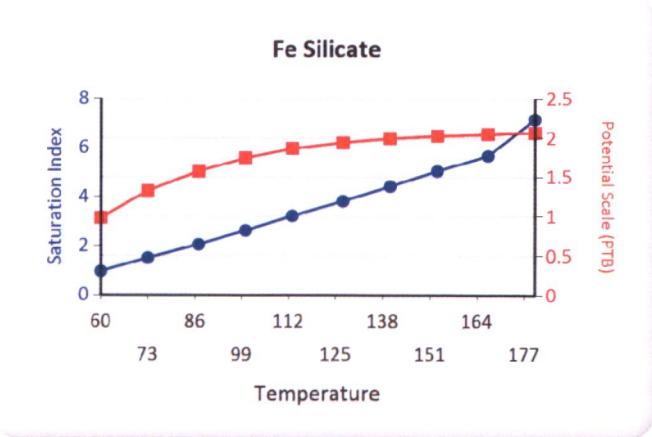







Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
1.4
1.2
1
0.8
0.6
0.4
0.2
0
60
86
112
138
164
73
99
125
151
177


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
5
4
3
2
1
0
50
40
30
20
10
0
60
86
112
138
164
73
99
125
151
177


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
8
6
4
2
0
2.5
2
1.5
1
0.5
0
60
86
112
138
164
73
99
125
151
177

Mechanical Integrity Test
Tubing/Casing Annulus Pressure Test

U.S. Environmental Protection Agency
Underground Injection Control Program
1595 Wynkoop Street, Denver, CO 80202

EPA Witness: _____ Date: 2/5/16
Test conducted by: CHAD STEVENSON
Others present: _____

Well Name: 29-09 UT20736-04233 Type: ER SWD **Status: AC TA UC**
Field: ANTELOPE CREEK
Location: 29-09 Sec: ____ T ____ N / S R ____ E / W County: DUCHESNE State: UT
Operator: PETROGLYPH ENERGY
Last MIT: ____/____/____ **Maximum Allowable Pressure:** _____ **PSIG**

Regularly scheduled test? [X] Yes [ ] No
Initial test for permit? [ ] Yes [ ] No
Test after well rework? [ ] Yes [ ] No

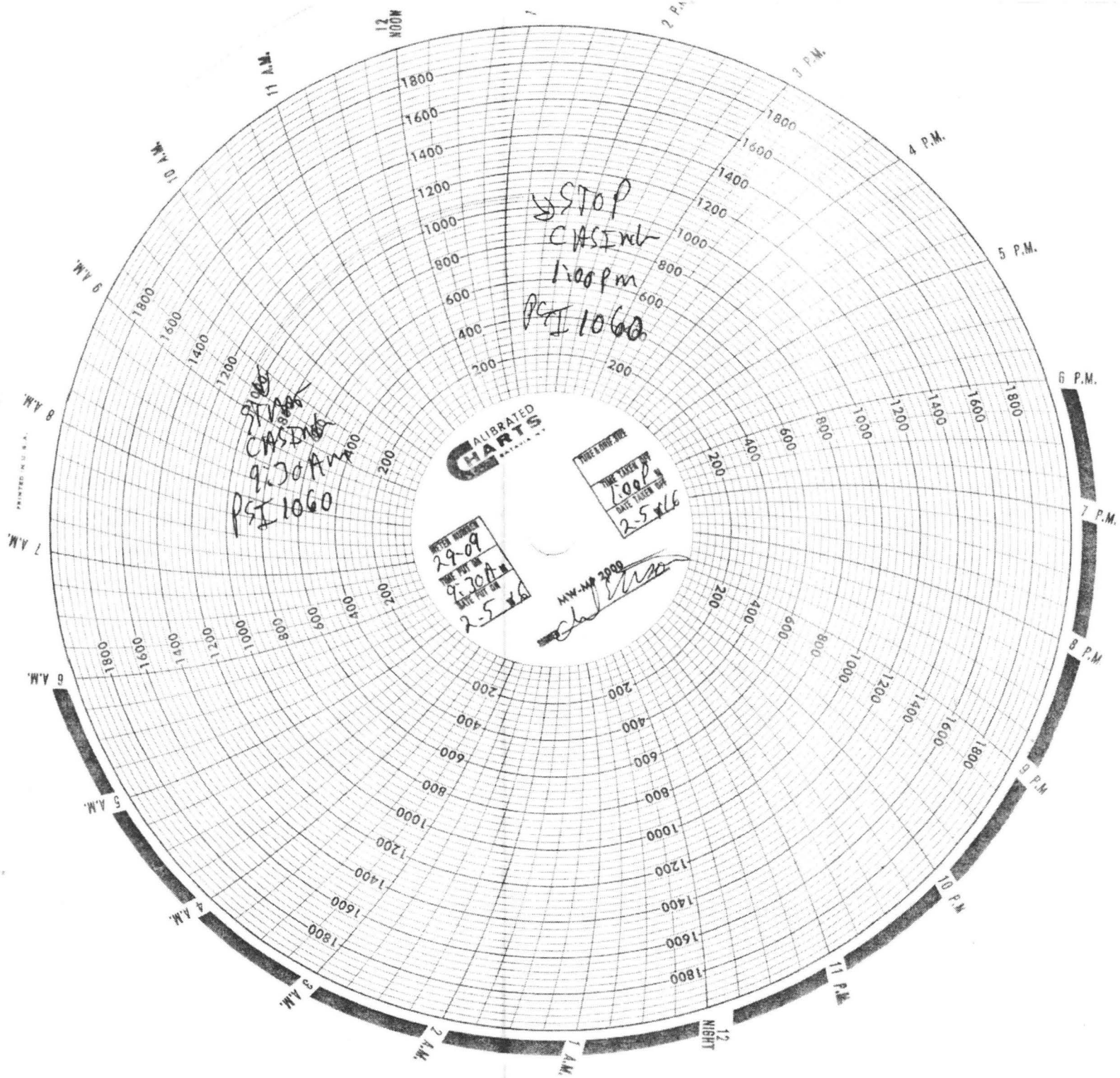
Well injecting during test? If Yes, rate: 29 **bpd**
Pre-test annulus pressure: _____ **psig**

MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING		**PRESSURE RECORD**	
Initial Pressure	1850 psig	psig	psig
End of test pressure	1850 psig	psig	psig
CASING / TUBING ANNULUS		**PRESSURE RECORD**	
0 minutes	1060 psig	psig	psig
5 minutes	1060 psig	psig	psig
10 minutes	1060 psig	psig	psig
15 minutes	1060 psig	psig	psig
20 minutes	1060 psig	psig	psig
25 minutes	1060 psig	psig	psig
30 minutes	1060 psig	psig	psig
3½ HOURS ~~minutes~~	1060 psig	psig	psig
_____ minutes	psig	psig	psig
RESULT	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test ? **If Yes,** _____ **psig.**

	BLUE	CBI
TA	✓	

U2 Entered
Date 4/25/16
Initial JB


12 NOON
1
2 P.M.
3 P.M.
4 P.M.
5 P.M.
6 P.M.
7 P.M.
8 P.M.
9 P.M.
10 P.M.
11 P.M.
12 NIGHT
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
1800
1600
1400
1200
1000
800
600
400
200
STOP
CASING
1:00 pm
PSI 1060
STOP
CASING
9:30 AM
PSI 1060
CALIBRATED CHARTS
METER NUMBER
29-09
TIME PUT ON
9:30 AM
DATE PUT ON
2-5-96
TIME TAKEN OFF
1:00 PM
DATE TAKEN OFF
2-5-96
MW-MP 2000

OMB No. 2040-0042 Approval Expires 12/31/2011

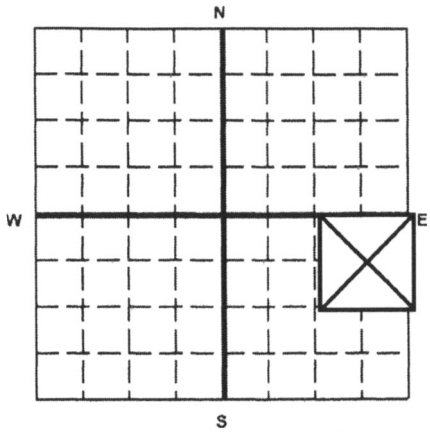
EPA

United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee	Name and Address of Surface Owner
Petroglyph Operating Company, Inc. 2258 P.O. Box 7608 Boise, Idaho 83709	Ute Indian Tribe P.O. Box 70 Ft. Duchesne, Utah 84026

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	Duchesne	UT2736-04233

Surface Location Description

___ 1/4 of ___ 1/4 of NE 1/4 of SE 1/4 of Section 29 Township 5S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 1324 ft. frm (N/S) S Line of quarter section and 1160 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY
- [ ] Brine Disposal
- [X] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [ ] Individual
- [X] Area

Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 29-09

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	14	1809	1842	908		0	0
February	14	1841	1844	985		0	0
March	14	1818	1844	1055		0	0
April	14	1847	1857	1233		0	0
May	14	1835	1843	1023		0	0
June	14	1829	1859	903		0	0
July	14	1792	1841	639		0	0
August	14	1819	1838	811		0	0
September	14	1690	1845	465		0	0
October	14	1805	1836	874		0	0
November	14	1834	1847	879		0	0
December	14	1648	1852	651		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		2/10/2015

EPA Form 7520-14 (Rev. 12-08)

UIC Entered
Date 2/31/15
Initial GW

	GREEN	BLUE	CBI
TAB		2	

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

multi-chem®
A HALLIBURTON SERVICE

Units of Measurement: **Standard**

Water Analysis Report

Production Company:	**PETROGLYPH OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-09 INJ, DUCHESNE**	Lab Tech:	**Gary Winegar**
Sample Point:	**WELLHEAD**		
Sample Date:	**1/7/2015**		
Sample ID:	**WA-297537**		

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/14/2015
System Temperature 1 (°F):	160
System Pressure 1 (psig):	1300
System Temperature 2 (°F):	80
System Pressure 2 (psig):	15
Calculated Density (g/ml):	0.9989
pH:	6.50
Calculated TDS (mg/L):	2535.78
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	24.00
H_2S in Gas (%):	
H2S in Water (mg/L):	5.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	214.30	Chloride (Cl):	1000.00
Potassium (K):	3.76	Sulfate (SO_4):	336.00
Magnesium (Mg):	72.41	Bicarbonate (HCO_3):	732.00
Calcium (Ca):	146.86	Carbonate (CO_3):	
Strontium (Sr):	4.31	Acetic Acid (CH_3COO)	
Barium (Ba):	0.48	Propionic Acid (C_2H_5COO)	
Iron (Fe):	1.90	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.45	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.02	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.17	Silica (SiO_2):	23.12

Notes:
B=.82 Al=0 Li=.24

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
80.00	14.00	0.00	0.00	1.27	0.27	0.92	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.53	0.23
88.00	157.00	0.00	0.00	1.19	0.27	0.77	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.28	0.23
97.00	300.00	0.00	0.00	1.11	0.26	0.76	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.16	0.23
106.00	443.00	0.00	0.00	1.04	0.26	0.76	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.06	0.23
115.00	585.00	0.00	0.00	0.98	0.26	0.77	0.83	0.05	0.16	0.00	0.00	0.00	0.00	0.00	0.00	7.97	0.23
124.00	728.00	0.03	3.66	0.92	0.25	0.78	0.83	0.12	0.33	0.00	0.00	0.00	0.00	0.00	0.00	7.88	0.23
133.00	871.00	0.08	8.52	0.87	0.25	0.80	0.84	0.19	0.48	0.00	0.00	0.00	0.00	0.00	0.00	7.80	0.23
142.00	1014.00	0.13	13.51	0.83	0.24	0.83	0.86	0.25	0.61	0.00	0.00	0.00	0.00	0.00	0.00	7.73	0.23
151.00	1157.00	0.18	18.59	0.79	0.24	0.86	0.87	0.32	0.72	0.00	0.00	0.00	0.00	0.00	0.00	7.67	0.23
160.00	1300.00	0.23	23.74	0.75	0.23	0.89	0.88	0.39	0.81	0.00	0.00	0.00	0.00	0.00	0.00	7.61	0.23

		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
80.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.45	0.01	0.00	0.00	0.00	0.00	0.00	0.00
88.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00
97.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.87	0.01	0.00	0.00	0.00	0.00	0.00	0.00
106.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.66	0.01	0.00	0.00	0.00	0.00	0.00	0.00
115.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.47	0.01	0.00	0.00	0.00	0.00	0.00	0.00
124.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.30	0.01	0.00	0.00	0.00	0.00	0.00	0.00
133.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00
142.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.98	0.01	0.00	0.00	0.00	0.00	0.00	0.00
151.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.83	0.01	0.00	0.00	0.00	0.00	0.00	0.00
160.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70	0.01	0.00	0.00	0.00	0.00	0.00	0.00

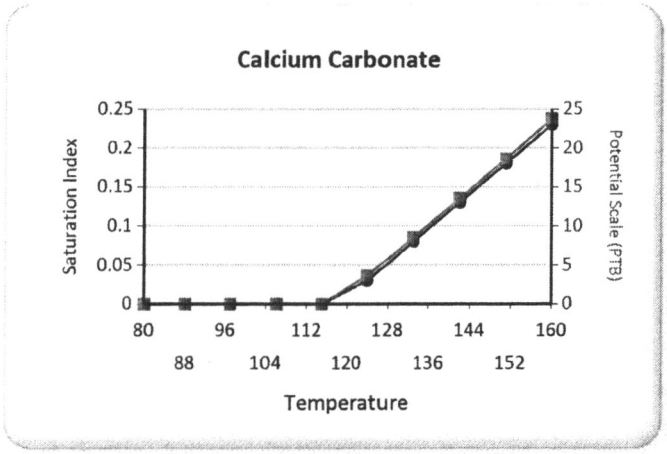
Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

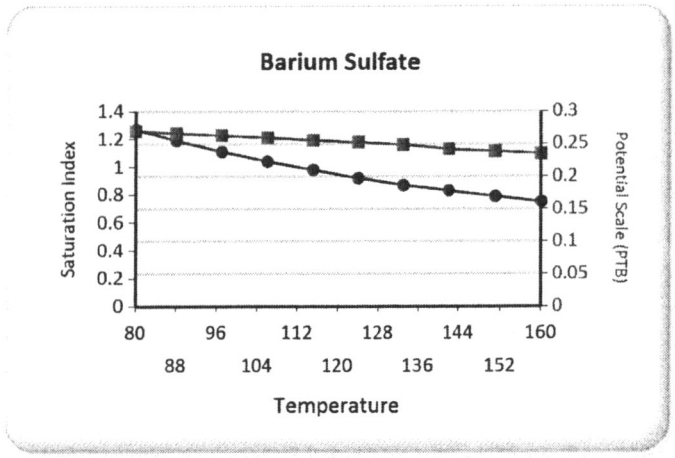
multi-chem®
A HALLIBURTON SERVICE

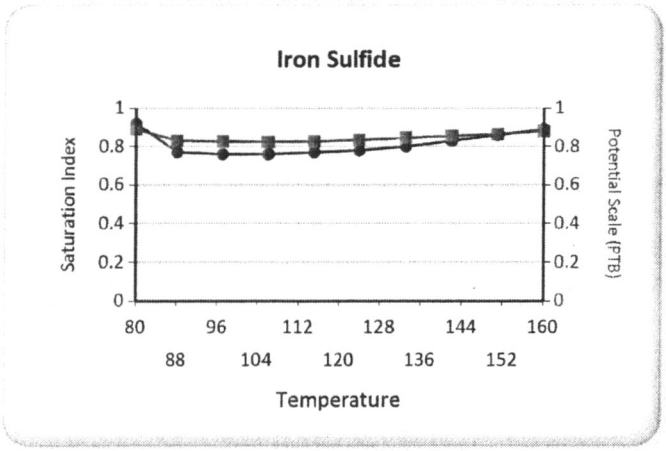
Water Analysis Report

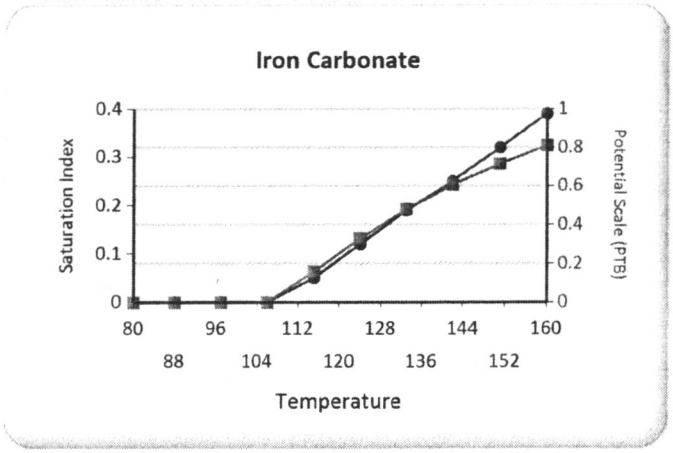
These scales have positive scaling potential under initial temperature and pressure: Barium Sulfate Iron Sulfide Zinc Sulfide Lead Sulfide

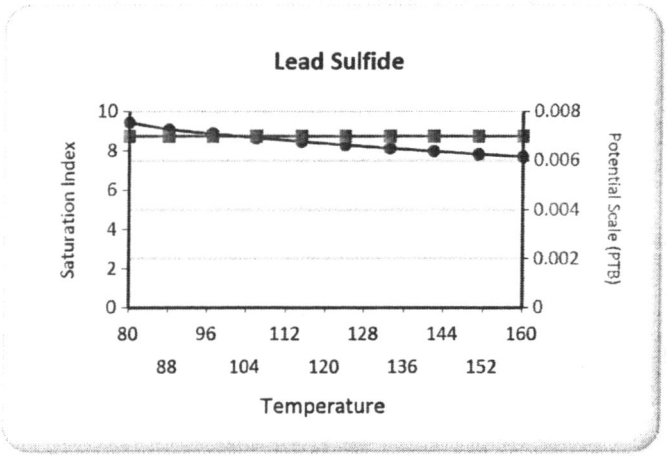
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide

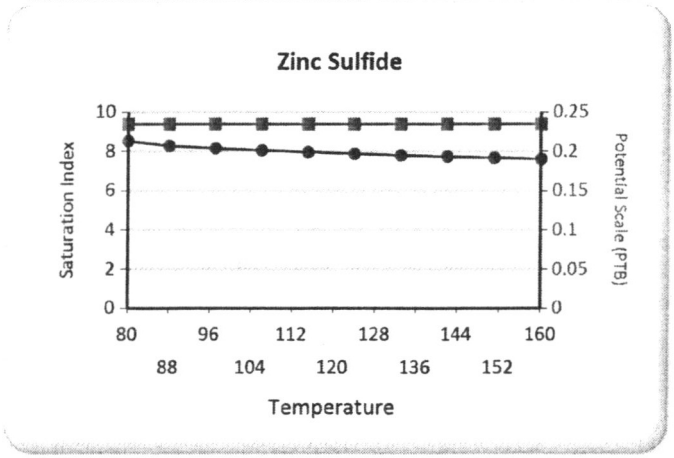












OMB No. 2040-0042 Approval Expires 12/31/2011

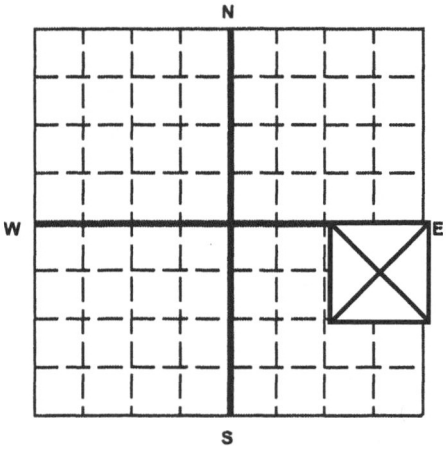
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah 84026

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Utah	Duchesne	UT2736-04233

Surface Location Description
____ 1/4 of ____ 1/4 of NE 1/4 of SE 1/4 of Section 29 Township 5S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 1324 ft. frm (N/S) S Line of quarter section
and 1160 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY
- [ ] Brine Disposal
- [x] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [ ] Individual
- [x] Area

Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 29-09

MONTH	YEAR	INJECTION PRESSURE AVERAGE PSIG	INJECTION PRESSURE MAXIMUM PSIG	TOTAL VOLUME INJECTED BBL	TOTAL VOLUME INJECTED MCF	TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MINIMUM PSIG	TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MAXIMUM PSIG
January	13	1771	1835	621		0	0
February	13	1814	1840	849		0	0
March	13	1787	1816	710		0	0
April	13	1834	1850	1312		0	0
May	13	1853	1872	1242		0	0
June	13	1825	1844	715		0	0
July	13	1813	1843	778		0	0
August	13	1810	1849	974		0	0
September	13	1819	1861	1145		0	0
October	13	1831	1839	1097		0	0
November	13	1829	1847	993		0	0
December	13	1819	1843	964		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		2/11/2014

EPA Form 7520-11 (Rev. 12-08)

GREEN BLUE CBI
AB ✓

U2 Entered
Date 3/21/14
Initial DB

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

multi-chem®
A HALLIBURTON SERVICE

Units of Measurement: **Standard**

Water Analysis Report

Production Company: **PETROGLYPH ENERGY INC**
Well Name: **UTE TRIBAL 29-09 INJ**
Sample Point: **Wellhead**
Sample Date: **1/8/2014**
Sample ID: **WA-262999**

Sales Rep: **James Patry**
Lab Tech: **Gary Winegar**

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/15/2014
System Temperature 1 (°F):	180
System Pressure 1 (psig):	1300
System Temperature 2 (°F):	60
System Pressure 2 (psig):	15
Calculated Density (g/ml):	0.999
pH:	7.50
Calculated TDS (mg/L):	3137.37
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	1.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	816.12	Chloride (Cl):	1000.00
Potassium (K):	1.50	Sulfate (SO_4):	361.00
Magnesium (Mg):	64.00	Bicarbonate (HCO_3):	732.00
Calcium (Ca):	135.00	Carbonate (CO_3):	
Strontium (Sr):	3.50	Acetic Acid (CH_3COO)	
Barium (Ba):	0.10	Propionic Acid (C_2H_5COO)	
Iron (Fe):	2.30	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.27	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.01	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.17	Silica (SiO_2):	21.40

Notes:
B=.4 Al=0 Li=.03

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.73	39.12	0.76	0.05	1.77	0.87	0.71	1.32	0.00	0.00	0.00	0.00	0.00	0.00	9.32	0.14
73.00	157.00	0.71	37.84	0.61	0.05	1.61	0.84	0.74	1.36	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.14
86.00	300.00	0.76	40.80	0.48	0.04	1.54	0.83	0.84	1.42	0.00	0.00	0.00	0.00	0.00	0.00	8.77	0.14
100.00	443.00	0.82	44.14	0.37	0.04	1.49	0.83	0.95	1.47	0.00	0.00	0.00	0.00	0.00	0.00	8.57	0.14
113.00	585.00	0.88	47.83	0.27	0.03	1.46	0.82	1.05	1.51	0.00	0.00	0.00	0.00	0.00	0.00	8.39	0.14
126.00	728.00	0.95	51.80	0.19	0.02	1.45	0.82	1.15	1.55	0.00	0.00	0.00	0.00	0.00	0.00	8.23	0.14
140.00	871.00	1.02	56.03	0.12	0.01	1.46	0.82	1.25	1.57	0.00	0.00	0.00	0.00	0.00	0.00	8.09	0.14
153.00	1014.00	1.09	60.44	0.06	0.01	1.47	0.82	1.36	1.59	0.00	0.00	0.00	0.00	0.00	0.00	7.97	0.14
166.00	1157.00	1.17	64.99	0.02	0.00	1.50	0.83	1.46	1.61	0.00	0.00	0.00	0.00	0.00	0.00	7.86	0.14
180.00	1300.00	1.26	69.62	0.00	0.00	1.55	0.84	1.56	1.62	0.00	0.00	0.00	0.00	0.00	0.00	7.76	0.14

Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

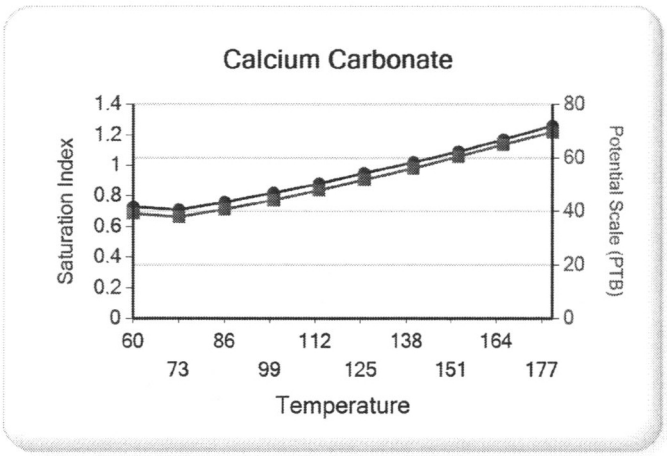
multi-chem®
A HALLIBURTON SERVICE

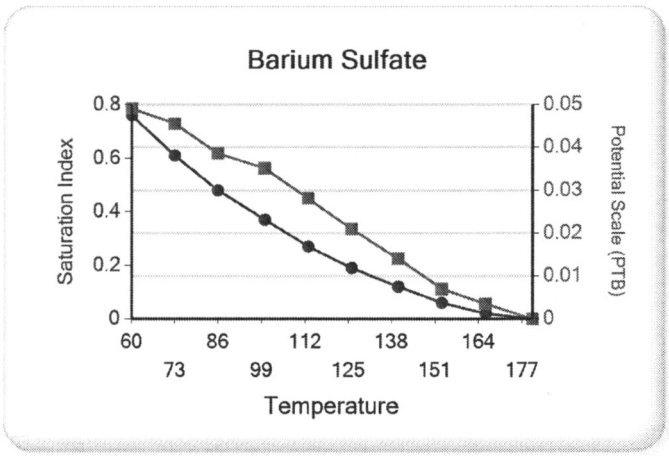
Water Analysis Report

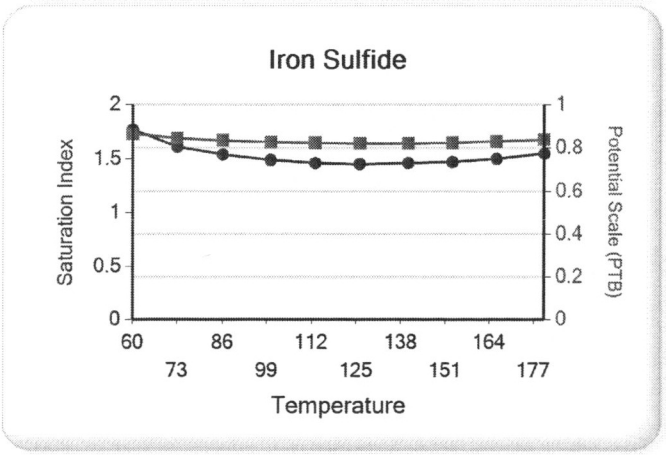
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.43	0.00	0.00	0.00	0.00	0.00	1.00	0.86
73.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.92	0.00	0.00	0.00	0.00	0.00	1.05	0.88
86.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.53	0.00	0.00	0.00	0.00	0.00	1.51	1.13
100.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.17	0.00	0.00	0.00	0.00	0.00	2.01	1.32
113.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.84	0.00	0.00	0.00	0.00	0.00	2.54	1.48
126.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.54	0.00	0.00	0.00	0.00	0.00	3.09	1.58
140.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.06	8.27	0.00	0.53	3.17	0.00	0.00	3.67	1.65
153.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.10	8.03	0.00	1.33	8.08	0.02	0.19	4.26	1.70
166.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.13	7.81	0.00	2.12	13.07	0.49	2.81	4.86	1.74
180.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.14	7.61	0.00	2.91	17.65	0.96	5.35	5.47	1.76

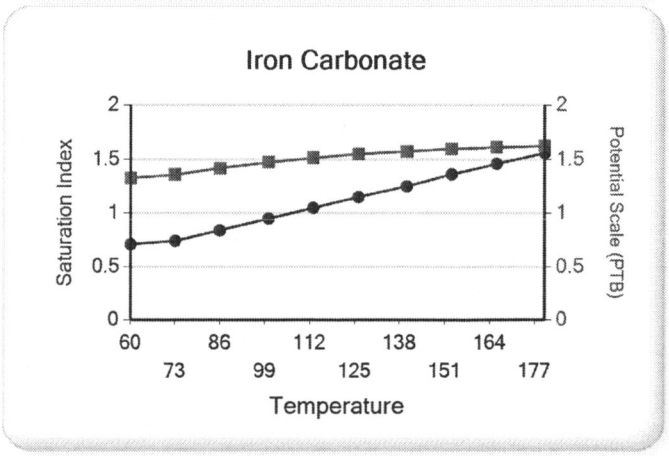
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide Fe Silicate

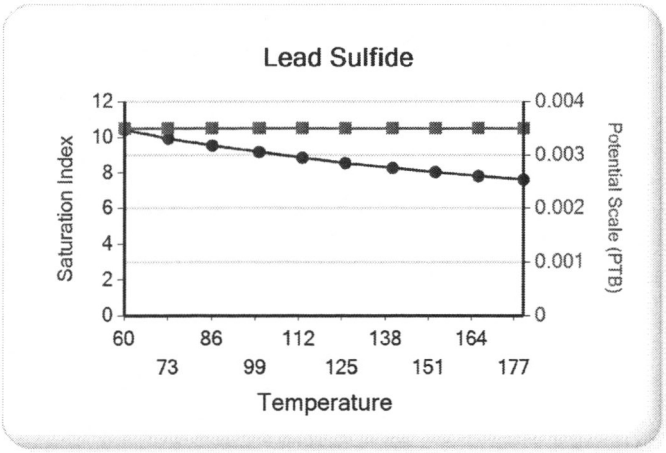
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

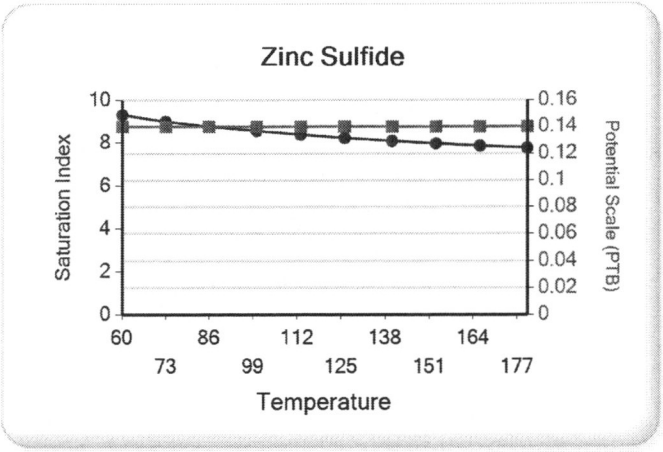


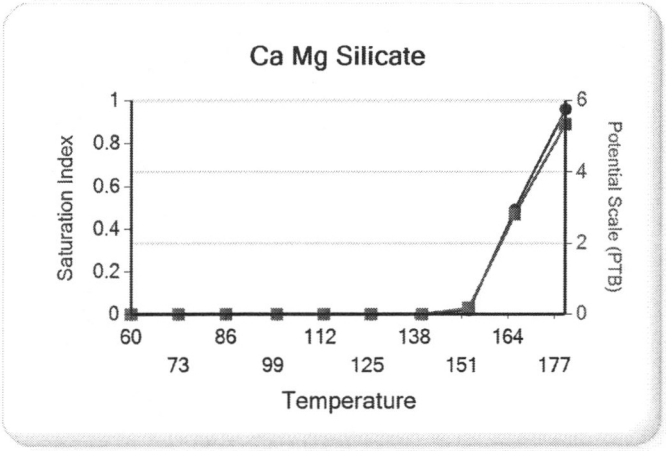


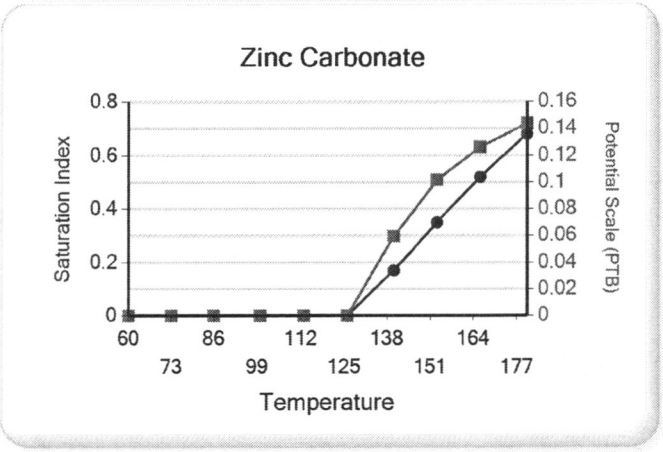


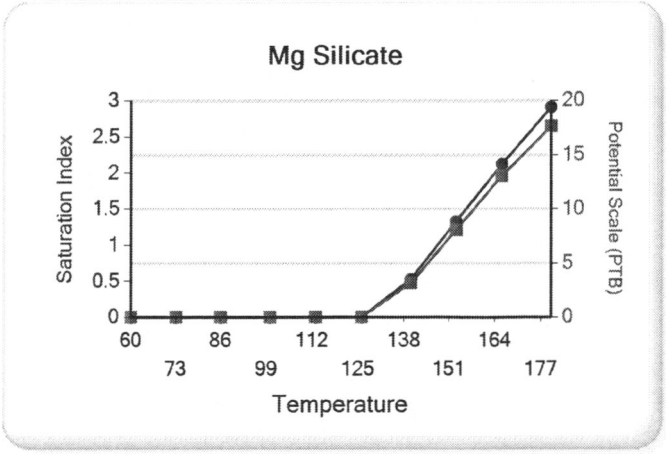


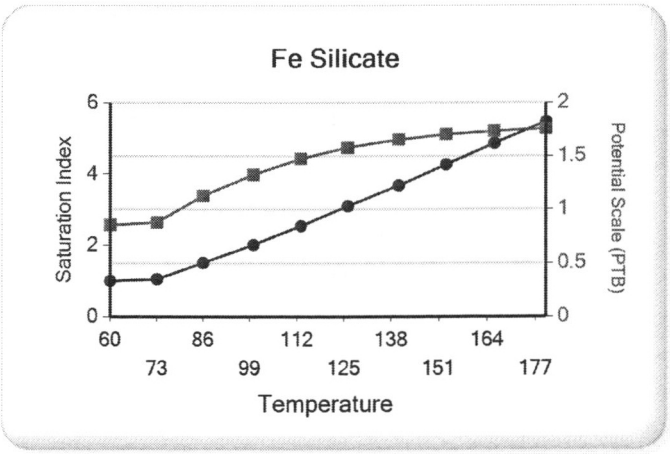

Lead Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


Zinc Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


Ca Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
0
2
4
6
0
0.5
1
1.5
2
60
73
86
99
112
125
138
151
164
177

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

MAY 12 1995

Ref: 8WM-DW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

R. A. Christensen, President
Petroglyph Operating Company, Inc.
6209 North Highway 61
Hutchinson, Kansas 67502

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Antelope Creek Field Waterflood
EPA Area Permit No. UT2736-00000
Duchesne County, Utah

Dear Mr. Christensen:

A request for authorization to inject into the two recently converted wells listed below was received from Petroglyph's Roosevelt, Utah office on May 9, 1995. The Well Rework Records, well schematics, and mechanical integrity test results were included with the request. Petroglyph has complied with all pertinent conditions [Part II, C. 1.] of the area permit which includes these two wells, and may begin injection operations.

Well	Location	EPA Permit No.
Ute Tribal #1-29 (old 1-29) 29-09	SE/4 Sec 29, T5S-R3W	UT2736-04233
Ute Tribal #3-5 E3	SE/4 Sec 5, T5S-R3W	UT2736-04234

Please be aware of the monitoring, recordkeeping, and reporting obligations described in Part II, Section D of the permit. If you have any questions on this action, you may call John Carson at (303) 293-1435. Also, please direct all correspondence to the attention of John Carson at Mail Code 8WM-DW.

Sincerely,

Thomas J. Pike
Chief
UIC Implementation Section

cc: Ms. Deanna Rice
Petroglyph Operating Company, Inc.
P.O. Drawer 607
Roosevelt, Utah 84066

Printed on Recycled Paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

OCT 28 1994

Ref: 8WM-DW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

R. A. Christensen, President
Petroglyph Operating Company, Inc.
6209 North Highway 61
Hutchinson, Kansas 67502

RE: UNDERGROUND INJECTION CONTROL (UIC)
Conversion of Additional Wells
Antelope Creek Field Waterflood
EPA Area Permit No. UT2736-00000
Duchesne County, Utah

Dear Mr. Christensen:

We are in receipt of your letter of October 13, 1994, requesting that two (2) production wells be converted to enhanced recovery wells as authorized under Area Permit UT2736-00000. The well locations, well schematics, conversion procedures, and plugging and abandonment plans submitted by your office have been reviewed and approved. The individual permit numbers for these two (2) wells are listed below:

WELL NAME	EPA PERMIT
(old 1-29) 29-01	
Ute Tribal #1-29	UT2736-04233
Ute Tribal #3-5 E3	UT2736-04234

Please refer to Part II, Section A. 2. and Section C. 2. of the area permit for guidance regarding construction details and testing requirements. Following completion of the well conversions, but prior to commencement of injection operations, each well must undergo and pass a mechanical integrity pressure test. A two (2) week notice of the scheduled tests is required so that we can arrange to witness them. Authorization to inject will be granted for each well following submission of a Well Rework Record (EPA Form 7520-12) and a successful demonstration of mechanical integrity.

Printed on Recycled Paper

If you have any questions on this action, you may contact John Carson at (303) 293-1435. **Also, please direct all correspondence to the attention of John Carson at Mail Code 8WM-DW.**

Sincerely,

Thomas J. Pike
Chief
UIC Implementation Section

Enclosures

cc: Luke Duncan
Northern Ute Tribe

Ferron Secakuku
Northern Ute Tribe

Norman Cambridge
Bureau of Indian Affairs

Jerry Kenczka
Bureau of Land Management

Gilbert Hunt
State of Utah Natural Resources
Division of Oil, Gas and Mining

Scan under
UT20736-04233
Add Well to Area
Permit

Scan under
UT20736-04233
Authorization to
Inject - Final

UT2736-04233

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

CONCURRENCE COPY

Ref: 8ENF-T

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB - 9 2001

Mr. Micheal Safford
Petroglyph Energy, Inc.
4116 W. 3000 S. Ioka Ln.
P. O. Box 607
Roosevelt, Utah 84006

Re: UNDERGROUND INJECTION CONTROL (UIC)
Permission To Resume Injection
Ute Tribal #29-09
EPA ID No. UT2736-04233
Antelope Creek Field
Duchesne County, Utah

Dear Mr. Safford:

EPA received your FAX, dated February 7, 2001, with information you gathered when you conducted a mechanical integrity test (MIT) February 5, 2001 on the above-referenced well following an acid job and perforation procedure. This data shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations (40 CFR), Section 144.51(q)(2), permission to resume injection is granted.

Under continuous service, the next MIT will be due on or before February 6, 2006. If the well is to be temporarily abandoned (TA'd), EPA should be notified. If the well is abandoned for more than two (2) years, it shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Petroglyph to extend the TA status.

Failure to comply with UIC regulations found at 40 CFR Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C. 300h and subject to enforcement by EPA.

8ENF-T
NCJ
2-8-2001

2/8/01

Printed on Recycled Paper

UT20736-04233

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

CONCURRENCE COPY

Ref: 8ENF-T

FEB - 9 20(

Scan under UT20736-04233

Corrective Action Complete

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Micheal Safford
Petroglyph Energy, Inc.
4116 W. 3000 S. Ioka Ln.
P. O. Box 607
Roosevelt, Utah 84006

Re: UNDERGROUND I
Permission To
Ute Tribal #2
EPA ID No. UT
Antelope Creek Field
Duchesne County, Utah

Dear Mr. Safford:

EPA received your FAX, dated February 7, 2001, with information you gathered when you conducted a mechanical integrity test (MIT) February 5, 2001 on the above-referenced well following an acid job and perforation procedure. This data shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations (40 CFR), Section 144.51(q)(2), permission to resume injection is granted.

Under continuous service, the next MIT will be due on or before February 6, 2006. If the well is to be temporarily abandoned (TA'd), EPA should be notified. If the well is abandoned for more than two (2) years, it shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Petroglyph to extend the TA status.

Failure to comply with UIC regulations found at 40 CFR Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C. 300h and subject to enforcement by EPA.

8ENF-T
NCW
2-8-2001

2/8/01

Printed on Recycled Paper

If you have any questions concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

Connally E. Mears, Director
Technical Enforcement Program

cc: Roland McCook, Chairman
Uintah & Ouray Business Committee

Elaine Willie Environmental Coordinator
Ute Indian Tribe

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

FEB - 9 2001

Ref: 8ENF-T

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Micheal Safford
Petroglyph Energy, Inc.
4116 W. 3000 S. Ioka Ln.
P. O. Box 607
Roosevelt, Utah 84006

Re: UNDERGROUND INJECTION CONTROL (UIC)
Permission To Resume Injection
Ute Tribal #29-09
EPA ID No. UT2736-04233
Antelope Creek Field
Duchesne County, Utah

Dear Mr. Safford:

EPA received your FAX, dated February 7, 2001, with information you gathered when you conducted a mechanical integrity test (MIT) February 5, 2001 on the above-referenced well following an acid job and perforation procedure. This data shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations (40 CFR), Section 144.51(q)(2), permission to resume injection is granted.

Under continuous service, the next MIT will be due on or before February 6, 2006. If the well is to be temporarily abandoned (TA'd), EPA should be notified. If the well is abandoned for more than two (2) years, it shall be plugged and abandoned in accordance with UIC regulations unless sufficient reasons are provided by Petroglyph to extend the TA status.

Failure to comply with UIC regulations found at 40 CFR Parts 144 and 146 are violations of the Safe Drinking Water Act, 42 U.S.C. 300h and subject to enforcement by EPA.

Printed on Recycled Paper

If you have any questions concerning this letter, you may contact Al Craver at (303) 312-7821. Also, please direct all correspondence to the attention of Al Craver at Mail Code 8ENF-T.

Sincerely,

Connally E. Mears

Connally E. Mears, Director
Technical Enforcement Program

cc: Roland McCook, Chairman
Uintah & Ouray Business Committee

Elaine Willie Environmental Coordinator
Ute Indian Tribe

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	4149
CONNECTION TEL	84357229145
SUBADDRESS	
CONNECTION ID	PETROGLYPH-UTAH
ST. TIME	02/09 11:37
USAGE T	00'58
PGS.	3
RESULT	OK

TELEFAX

U.S. EPA REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405
FAX PHONE #: (303) 312-~~6071~~ 6409

TO: Mike Safford

AGENCY/FIRM: Petroglyph

MAIL CODE:

CITY/STATE:

FAX PHONE #: 435 722 9145 **PHONE #:**

NUMBER OF PAGES (including cover sheet): 3

FROM: Al Craver

OFFICE:

MAIL CODE:

GT 2736-042339
2/9/01

7000 1670 0007 3343 6250

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Res (Enc	

Postmark Here

To Roland McCook, Chairman
Uintah & Ouray Bus. Committee
Sent P.O. Box 190
Stre FT. Duchesne, UT 84026

City, State, ZIP+4

PS Form 3800, May 2000 — See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

FEB 15 2001

Roland McCook, Chairman
Uintah & Ouray Bus. Committee
P.O. Box 190
FT. Duchesne, UT 84026

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* JO
B. Date of Delivery 2.20.01

C. Signature
X ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7000 1670 0007 3343 6250

PS Form 3811, July 1999 — Domestic Return Receipt — 102595-00-M-0952

472736-09233
2/9/01

7000 1670 0007 3343 6243

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsem
Total Po:

Postmark Here

Sent To Elaine Willie, Environmental Coordinator
Ute Indian Tribe
P.O. Box 460
Street, Apt. FT.Duchesne, UT 84026
City, State, Z.

PS Form 3800, May 2000 See Reverse for Instructions

ENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to: FEB 15 2001

Elaine Willie, Environmental Coordinator
Ute Indian Tribe
P.O. Box 460
FT.Duchesne, UT 84026

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* CASSONDRA MANNING B. Date of Delivery 2/20/01

C. Signature
X Cassondra Manning
☐ Agent
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

Article Number *(Copy from service label)* 7000 1670 0007 3343 6243

S Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

472736-04233
2/9/01

7000 1670 0007 3343 6267

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee	

Postmark Here

Petroglyph Energy, Inc.
4116 W. 3000 S. Ioka Ln.
P.O. Box 607
Roosevelt, Utah 84006

Michael Stafford

Mr. Michael Stafford, Chairman

PS Form 3800, May 2000 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to: FEB 15 2001

Mr. Michael Stafford
Petroglyph Energy, Inc.
4116 W. 3000 S. Ioka Ln.
P.O. Box 607
Roosevelt, Utah [redacted]

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*
B. Date of Delivery 2-20-9

C. Signature
X
☐ Agent
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

Article Number *(Copy from service label)* 7000 1670 0007 3343 6267

S Form 3811, July 1999 — Domestic Return Receipt — 102595-00-M-0952