Inspection Report For Well: UT20736 - 04389

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: 12:55 am / pm

OPERATOR (only if different): _____

REPRESENTATIVE(S): Chad Stevinson

PRE-INSPECTION REVIEW

Petroglyph Operating Company, Inc

Well Name:	Ute Tribal 28-03		
Well Type:	Enhanced Recovery (2R)		
Operating Status:	AC (ACTIVE) as of 12/31/2002		
Oil Field:	Antelope Creek (Duchesne)		
Location:	NENW S28 T5S R3W		
Indian Country:	X, Uintah and Ouray		
Last Inspection:	8/28/2012	***Allowable Inj Pressure:***	2336 /
Last MIT:	Pass 9/12/2011	***Annulus Pressure From Last MIT:***	1445

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 1/2/14
Initials _____

OBSERVED VALUES:

Tubing Gauge:	[x] Yes / [ ] No	Pressure: U: 1926 / 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

ICIS Entered
12/17/13
Initials SR

GREEN	BLUE	CBI
	1	

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

Inspection Report For Well: UT20736 - 04389 (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: 12/10/13
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: Petroglyph 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

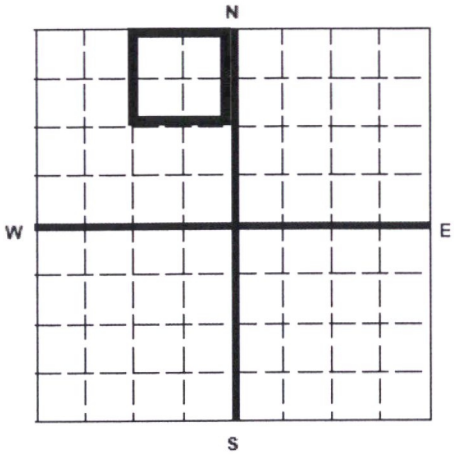
United States Environmental Protection Agency
Washington, DC 20460

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	UT2736-04389

Surface Location Description
___ 1/4 of 1/4 of NE 1/4 of NW 1/4 of Section 28 Township 5S Range 3W

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

Surface Location 520 ft. frm (N/S) N Line of quarter section
and 1983 ft. from (E/W) W 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 28-03

		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	1840	1886	1113		0	0
February	16	1923	1948	1277		0	0
March	16	1927	1942	1347		0	0
April	16	1892	1915	1279		0	0
May	16	1905	1926	1353		0	0
June	16	1888	1941	1212		0	0
July	16	1881	1912	1247		0	0
August	16	1885	1922	1263		0	0
September	16	1861	1893	1212		0	0
October	16	1891	1907	1378		0	0
November	16	1808	1873	1064		0	0
December	16	1852	1870	1232		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

U2 Entered
Date 4/5/17
Initial DB

GREEN BLUE CB
TAB 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 28-03 INJ, DUCHESNE**	Lab Tech:	**Kaitlyn Natelli**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2017**		
Sample ID:	**WA-345324**		

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

Sample Specifics

Test Date:	1/26/2017
System Temperature 1 (°F):	300
System Pressure 1 (psig):	2000
System Temperature 2 (°F):	130
System Pressure 2 (psig):	50
Calculated Density (g/ml):	0.9982
pH:	7.10
Calculated TDS (mg/L):	1462.90
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	74.00
H_2S in Gas (%):	
H2S in Water (mg/L):	5.00
Tot. SuspendedSolids(mg/L):	
Corrosivity(LanglierSat.Indx)	0.00
Alkalinity:	

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	317.28	Chloride (Cl):	51.00
Potassium (K):	3.23	Sulfate (SO_4):	150.00
Magnesium (Mg):	24.54	Bicarbonate (HCO_3):	854.00
Calcium (Ca):	46.32	Carbonate (CO_3):	
Strontium (Sr):	0.65	Hydroxide(HO):	
Barium (Ba):	0.38	Acetic Acid (CH_3COO)	
Iron (Fe):	8.63	Propionic Acid (C_2H_5COO)	
Zinc (Zn):	0.33	Butanoic Acid (C_3H_7COO)	
Lead (Pb):	0.00	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Ammonia NH_3:		Fluoride (F):	
Manganese (Mn):	0.10	Bromine (Br):	
Aluminum (Al):	0.01	Silica (SiO_2):	6.44
Lithium (Li):	2.61	Calcium Carbonate ($CaCO_3$):	
Boron (B):	0.36	Phosphates (PO_4):	2.02
Silicon (Si):	3.01	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	0.33	15.38	0.61	0.17	2.48	4.42	1.68	6.13	0.00	0.00	0.00	0.00	0.00	0.00	8.71	0.17
149.00	267.00	0.41	18.47	0.52	0.16	2.47	4.41	1.81	6.17	0.00	0.00	0.00	0.00	0.00	0.00	8.49	0.17
168.00	483.00	0.54	22.80	0.45	0.15	2.52	4.43	1.96	6.20	0.00	0.00	0.00	0.00	0.00	0.00	8.35	0.17
187.00	700.00	0.68	26.75	0.40	0.14	2.59	4.45	2.12	6.22	0.00	0.00	0.00	0.00	0.00	0.00	8.23	0.17
206.00	917.00	0.83	30.17	0.37	0.13	2.68	4.47	2.27	6.24	0.00	0.00	0.00	0.00	0.00	0.00	8.14	0.17
224.00	1133.00	0.99	32.99	0.36	0.13	2.79	4.50	2.42	6.25	0.00	0.00	0.00	0.00	0.00	0.00	8.06	0.17
243.00	1350.00	1.15	35.21	0.35	0.13	2.92	4.53	2.57	6.26	0.00	0.00	0.00	0.00	0.00	0.00	8.01	0.17
262.00	1567.00	1.33	36.87	0.36	0.13	3.06	4.55	2.71	6.26	0.00	0.00	0.00	0.00	0.00	0.00	7.98	0.17
281.00	1783.00	1.51	38.07	0.38	0.13	3.22	4.57	2.85	6.27	0.00	0.00	0.00	0.00	0.00	0.00	7.96	0.17
300.00	2000.00	1.69	38.91	0.41	0.14	3.38	4.59	2.99	6.27	0.00	0.00	0.00	0.00	0.00	0.00	7.96	0.17

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

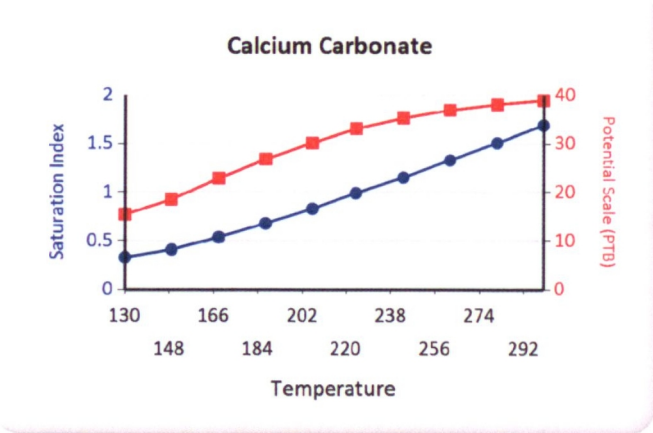
multi-chem®
A HALLIBURTON SERVICE

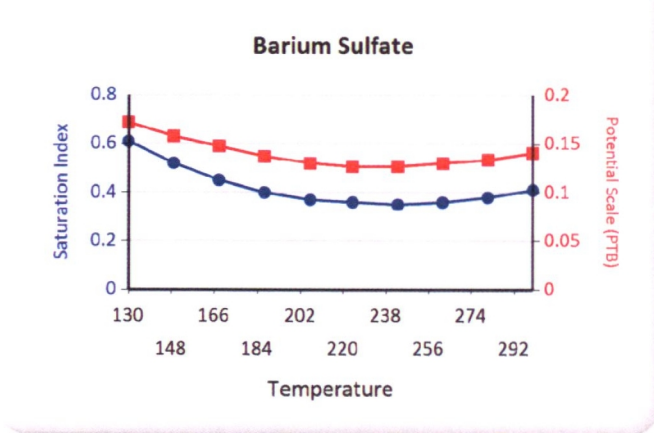
Water Analysis Report

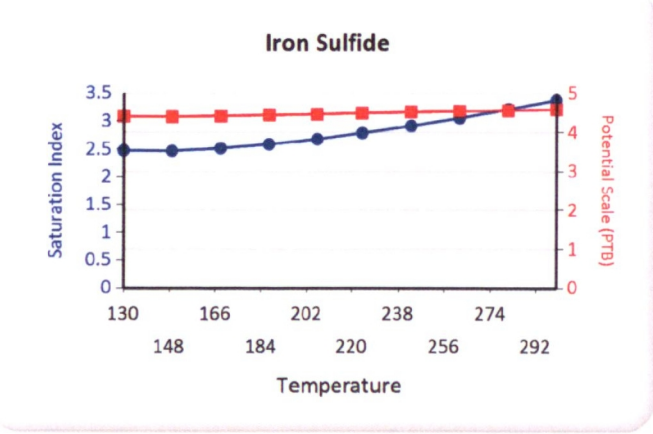
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	2.91	5.50
149.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.09	0.00	0.00	0.00	0.00	0.00	0.00	3.51	5.91
168.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.15	0.00	0.00	0.00	0.00	0.00	0.00	4.35	6.27
187.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.18	0.00	0.00	0.00	0.00	0.00	0.00	5.21	6.48
206.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.20	0.00	0.00	0.46	3.51	0.00	0.00	6.10	6.59
224.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.21	0.00	0.00	1.54	10.04	0.00	0.00	6.99	6.65
243.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.21	0.00	0.00	2.61	13.98	0.40	2.46	7.89	6.68
262.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.21	0.00	0.00	3.67	15.77	1.05	5.28	8.80	6.70
281.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.22	0.00	0.00	4.71	16.41	1.70	6.94	9.70	6.71
300.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	1.87	0.22	0.00	0.00	5.74	16.61	2.34	7.83	10.60	6.71

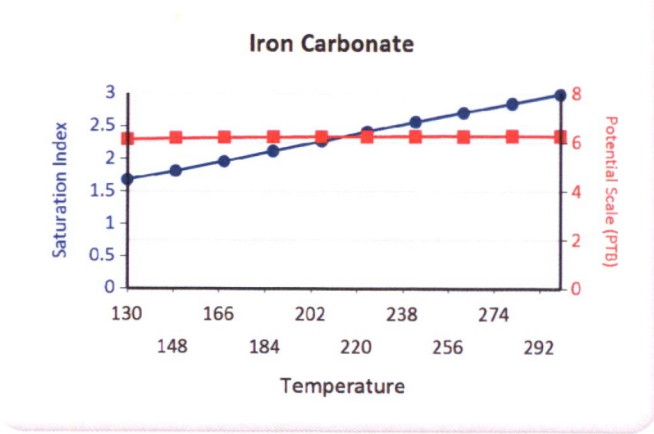
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Fe Silicate

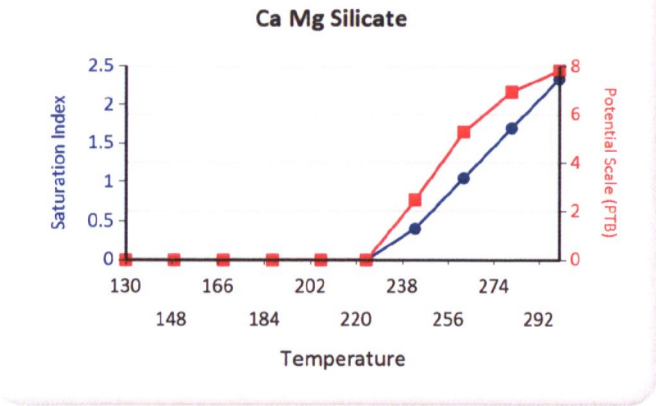
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

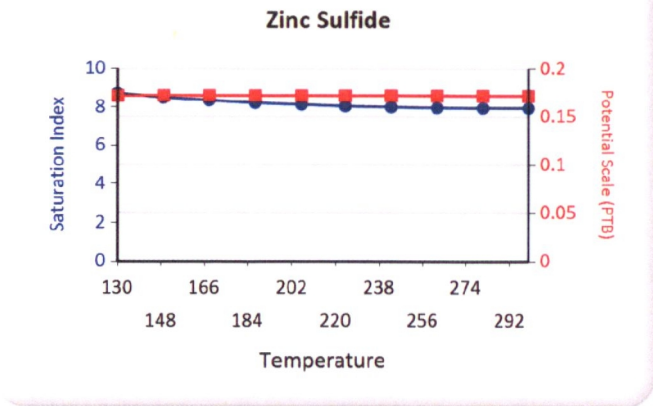


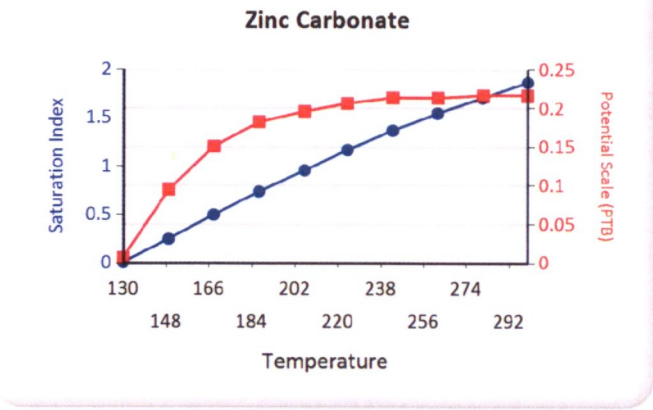


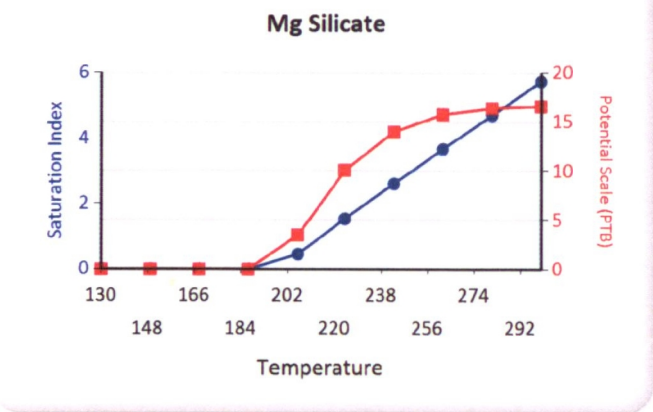


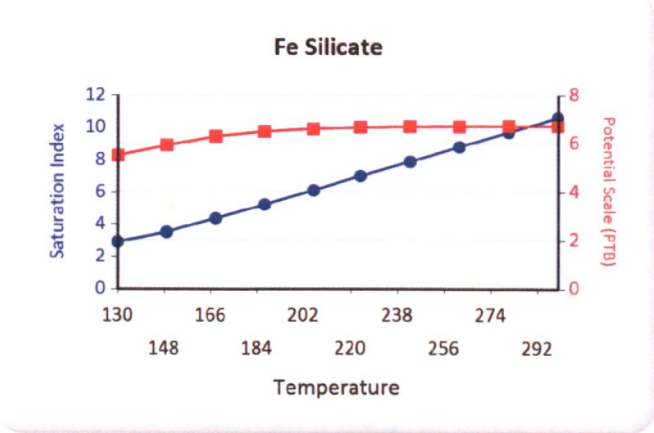



Ca Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
130 148 166 184 202 220 238 256 274 292


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


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
12
10
8
6
4
2
0
8
6
4
2
0
130
166
202
238
274
148
184
220
256
292

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

EPA

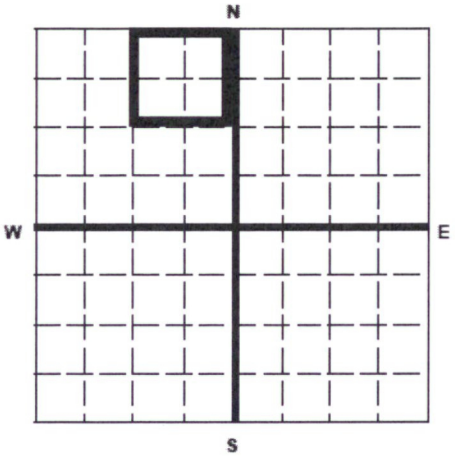
United States Environmental Protection Agency
Washington, DC 20460

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~~ 04389

Surface Location Description
___ 1/4 of ___ 1/4 of NE 1/4 of NW 1/4 of Section 28 Township 5S Range 3W

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

Surface Location 520 ft. frm (N/S) N Line of quarter section and 1983 ft. from (E/W) W Line of quarter section.

U2 Entered
Date 3/2/16
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 28-03

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	1825	1872	1385		0	0
February	15	1885	1925	1034		0	0
March	15	1895	1927	1203		0	0
April	15	1875	1929	1278		0	0
May	15	1880	1895	1516		0	0
June	15	1880	1910	1349		0	0
July	15	1875	1904	1085		0	0
August	15	1874	1904	1180		0	0
September	15	1879	1912	1192		0	0
October	15	1894	1896	1332		0	0
November	15	1892	1904	1288		0	0
December	15	1902	1920	1255		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

GREEN BLUE CBI
TAB 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 28-03 INJ, DUCHESNE**	Lab Tech:	**Michele Pike**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2016**		
Sample ID:	**WA-327660**		

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):	50
Calculated Density (g/ml):	1.0033
pH:	6.50
Calculated TDS (mg/L):	8501.01
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	40.00
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):	2790.20	Chloride (Cl):	4000.00
Potassium (K):	4.00	Sulfate (SO_4):	540.00
Magnesium (Mg):	81.56	Bicarbonate (HCO_3):	854.00
Calcium (Ca):	192.21	Carbonate (CO_3):	
Strontium (Sr):	5.48	Acetic Acid (CH_3COO)	
Barium (Ba):	0.52	Propionic Acid (C_2H_5COO)	
Iron (Fe):	2.99	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	1.53	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.44	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.03	Silica (SiO_2):	28.05
Aluminum (Al):	0.09	Calcium Carbonate ($CaCO_3$):	
Lithium (Li):	0.72	Phosphates (PO_4):	1.77
Boron (B):	0.26	Oxygen (O_2):	
Silicon (Si):	13.11		

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	50.00	0.42	49.40	0.51	0.21	0.00	0.00	0.71	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	267.00	0.25	30.52	0.53	0.22	0.00	0.00	0.52	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	483.00	0.14	17.71	0.56	0.22	0.00	0.00	0.39	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	700.00	0.04	4.94	0.60	0.23	0.00	0.00	0.26	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.00	917.00	0.00	0.00	0.65	0.24	0.00	0.00	0.13	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	1133.00	0.00	0.00	0.71	0.25	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1350.00	0.00	0.00	0.78	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	1567.00	0.00	0.00	0.87	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1783.00	0.00	0.00	0.98	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	2000.00	0.00	0.00	1.10	0.28	0.00	0.00	0.00	0.00	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

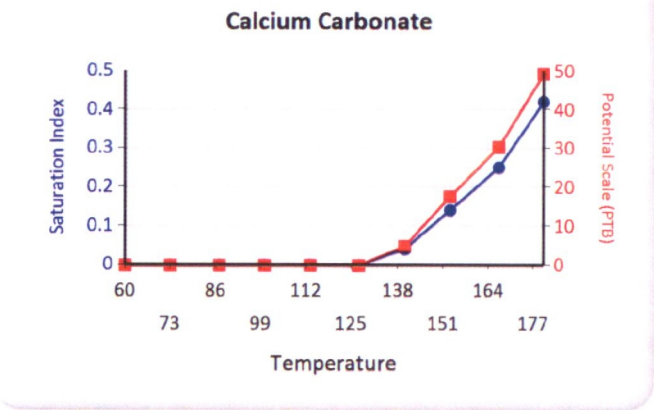
multi-chem®
A HALLIBURTON SERVICE

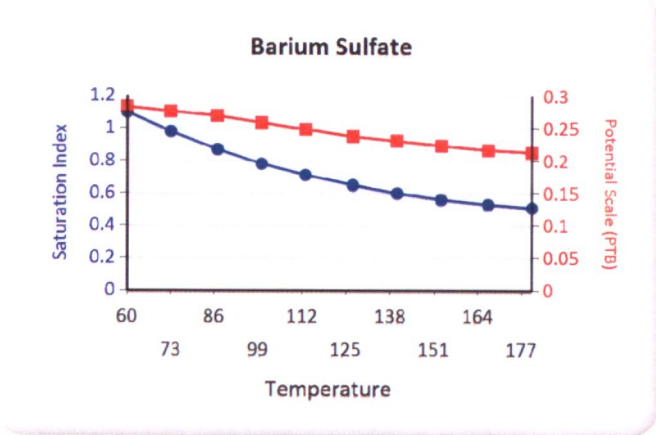
Water Analysis Report

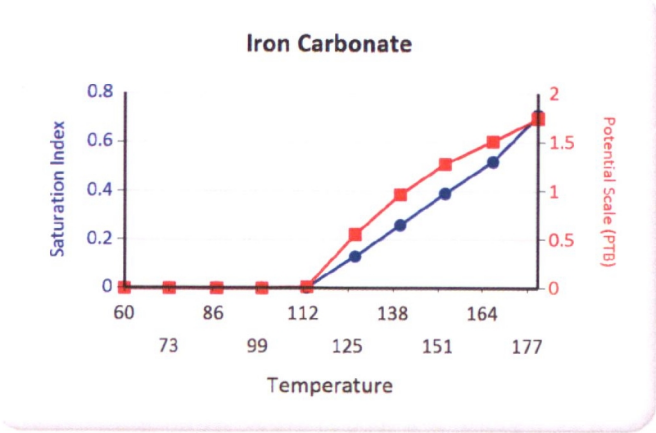
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.84	1.07
167.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	483.00	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	0.00	0.00
140.00	700.00	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	0.00	0.00
127.00	917.00	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	0.00	0.00
113.00	1133.00	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	0.00	0.00
100.00	1350.00	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	0.00	0.00
87.00	1567.00	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	0.00	0.00
73.00	1783.00	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	0.00	0.00
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	0.00	0.00

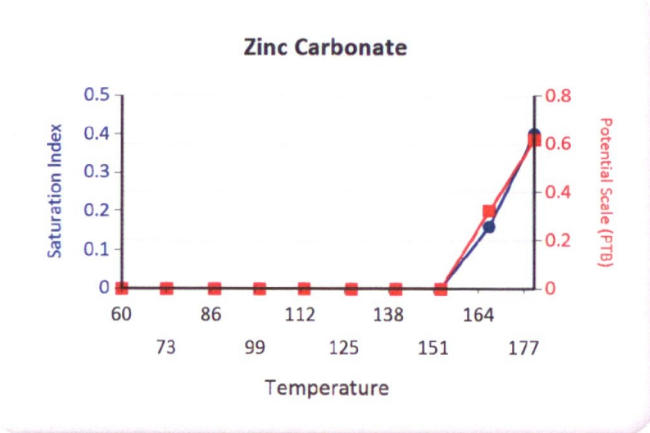
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Fe Silicate

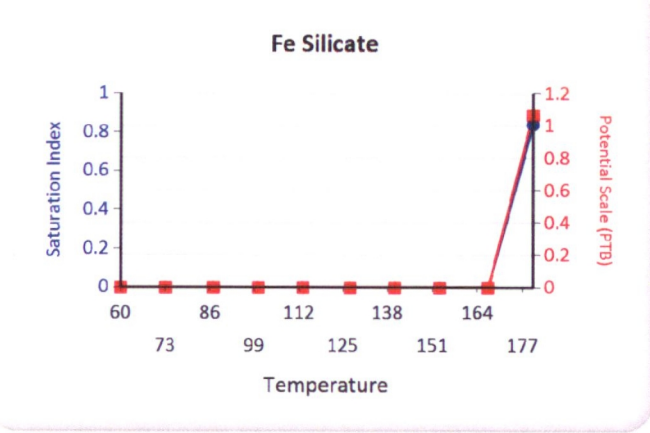
These scales have positive scaling potential under final temperature and pressure: Barium Sulfate








Zinc Carbonate
Saturation Index
0.5
0.4
0.3
0.2
0.1
0
Potential Scale (PTB)
0.8
0.6
0.4
0.2
0
60
86
112
138
164
73
99
125
151
177
Temperature


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

PETROGLYPH EXECUTIVE OFFICES

RECEIVED
OCT 03 2016
Office of Enforcement, Compliance
and Environmental Justice (UFO)

September 21, 2016

Gary Wang
Mail Code: 8ENF-UFO
US EPA Region 8
1595 Wyncoop Street
Denver, CO 80202-1129

RE: EPA AREA PERMIT NO. UT2736-00000
Mechanical Integrity Tests

Mr. Wang:

Please find enclosed the Mechanical Integrity Tests for the following wells:

- Ute Tribal 28-03 UT20736-04389
- Ute Tribal 04-13 UT20736-04636

If any questions, please reach me at (208) 685-9711.

U2 E
Date 10/7/16
Initi

Best Regards,

Nicole Colby
Manager, Land & Regulatory Compliance

Encl: test results

GREEN BLU
TAB 2

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: 9/7/16
Test conducted by: CHAD STEVENSON
Others present: _____

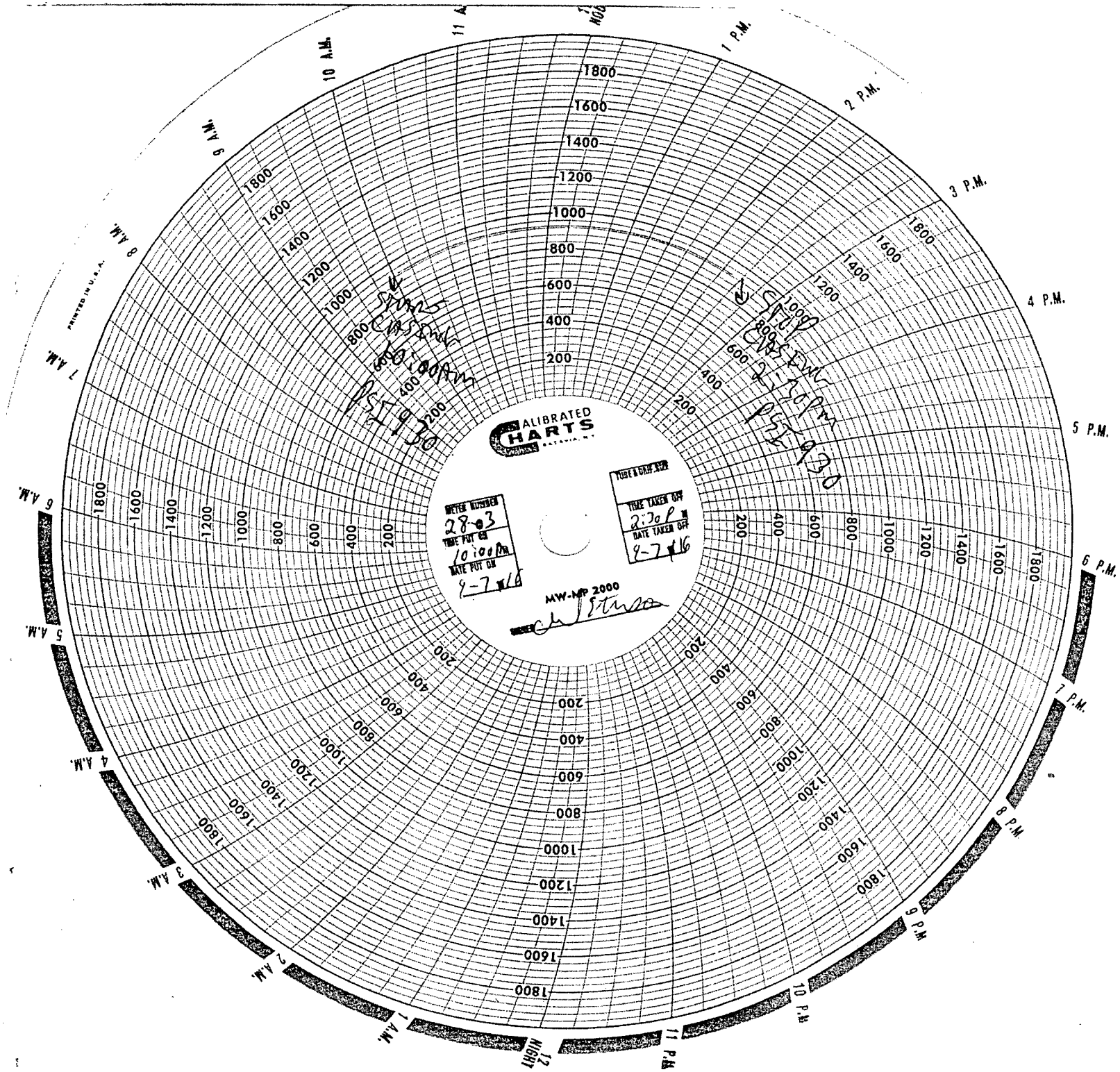
Well Name: 28-03 Type: ER SWD **Status:** AC TA UC
Field: ANTELOPE CREEK
Location: 28-03 Sec: ____ T ____ N / S R ____ E / W County: DUCHESNE State: UT
Operator: PETROGLYPH ENERG
Last MIT: ___/___/___ **Maximum Allowable Pressure:** _____ **PSIG**

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: 43 **bpd**
Pre-test annulus pressure: **psig**

MIT DATA TABLE	*Test #1*	*Test #2*	*Test #3*
TUBING		***PRESSURE RECORD***	
Initial Pressure	1915 psig	psig	psig
End of test pressure	1915 psig	psig	psig
CASING / TUBING ANNULUS		***PRESSURE RECORD***	
0 minutes	930 psig	psig	psig
5 minutes	930 psig	psig	psig
10 minutes	930 psig	psig	psig
15 minutes	930 psig	psig	psig
20 minutes	930 psig	psig	psig
25 minutes	930 psig	psig	psig
30 minutes	930 psig	psig	psig
4 1/2 HOURS ~~*minutes*~~	930 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.


CALIBRATED CHARTS
MW-MP 2000
METER NUMBER
28-03
TIME PUT ON
10:00 PM
DATE PUT ON
9-7-16
TUBE & ORIF. SIZE
TIME TAKEN OFF
2:30 P
DATE TAKEN OFF
9-7-16
PRINTED IN U.S.A.
MIDNIGHT
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.
NOON
1 P.M.
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.

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

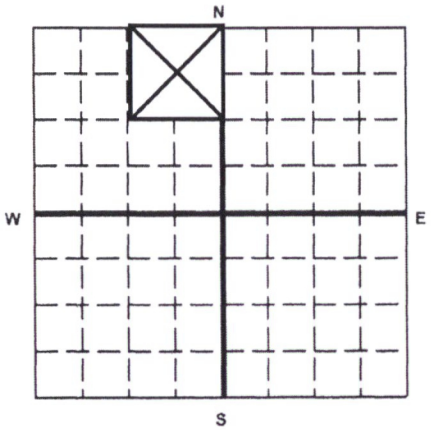
EPA

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	UT2736-04389

Surface Location Description

___ 1/4 of ___ 1/4 of NE 1/4 of NW 1/4 of Section 28 Township 5S Range 3W

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

Surface Location 520 ft. frm (N/S) N Line of quarter section and 1983 ft. from (E/W) W 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 28-03

		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	1925	1964	1781		0	0
February	14	1943	1958	1482		0	0
March	14	1899	1945	1725		0	0
April	14	1946	1960	1702		0	0
May	14	1931	1940	1452		0	0
June	14	1937	1965	1452		0	0
July	14	1890	1944	1549		0	0
August	14	1909	1922	1489		0	0
September	14	1803	1929	1287		0	0
October	14	1934	1933	1581		0	0
November	14	1926	1941	1436		0	0
December	14	1919	1940	1503		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		2/10/2015

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

U2 Entered
Date 3/31/15
Initial KW

TAB	GREEN	BLUE	CBI
		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 28-03 INJ, DUCHESNE**	Lab Tech:	**Gary Winegar**
Sample Point:	**WELLHEAD**		
Sample Date:	**1/7/2015**		
Sample ID:	**WA-297529**		

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):	1.0048
pH:	8.50
Calculated TDS (mg/L):	11370.14
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	15.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	3290.79	Chloride (Cl):	5000.00
Potassium (K):	57.14	Sulfate (SO_4):	150.00
Magnesium (Mg):	10.84	Bicarbonate (HCO_3):	2806.00
Calcium (Ca):	20.46	Carbonate (CO_3):	
Strontium (Sr):	4.93	Acetic Acid (CH_3COO)	
Barium (Ba):	1.81	Propionic Acid (C_2H_5COO)	
Iron (Fe):	0.39	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	1.26	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.08	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.07	Silica (SiO_2):	26.37

Notes:
B=7.84 Al=.06 Li=1.49

(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	1.43	17.07	1.06	0.98	3.17	0.21	1.65	0.28	0.00	0.00	0.00	0.00	0.00	0.00	11.70	0.66
88.00	157.00	1.43	17.06	0.98	0.96	3.08	0.21	1.68	0.28	0.00	0.00	0.00	0.00	0.00	0.00	11.51	0.66
97.00	300.00	1.45	17.09	0.90	0.94	3.02	0.21	1.72	0.28	0.00	0.00	0.00	0.00	0.00	0.00	11.34	0.66
106.00	443.00	1.46	17.12	0.83	0.91	2.97	0.21	1.77	0.28	0.00	0.00	0.00	0.00	0.00	0.00	11.19	0.66
115.00	585.00	1.48	17.15	0.76	0.89	2.92	0.21	1.81	0.28	0.00	0.00	0.00	0.00	0.00	0.00	11.04	0.66
124.00	728.00	1.50	17.19	0.70	0.86	2.88	0.21	1.85	0.28	0.00	0.00	0.00	0.00	0.00	0.00	10.90	0.66
133.00	871.00	1.52	17.22	0.65	0.83	2.85	0.21	1.89	0.28	0.00	0.00	0.00	0.00	0.00	0.00	10.77	0.66
142.00	1014.00	1.54	17.26	0.60	0.81	2.82	0.21	1.93	0.28	0.00	0.00	0.00	0.00	0.00	0.00	10.65	0.66
151.00	1157.00	1.56	17.29	0.56	0.78	2.80	0.21	1.96	0.28	0.00	0.00	0.00	0.00	0.00	0.00	10.54	0.66
160.00	1300.00	1.59	17.33	0.52	0.75	2.79	0.21	2.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	10.43	0.66

		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	1.33	0.81	12.77	0.03	1.17	7.97	0.36	3.43	5.81	0.30
88.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.82	12.47	0.03	1.46	9.48	0.50	4.47	5.93	0.30
97.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.82	12.20	0.03	1.82	11.24	0.69	5.79	6.13	0.30
106.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.83	11.94	0.03	2.19	12.86	0.88	7.06	6.33	0.30
115.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.83	11.70	0.03	2.56	14.32	1.07	8.26	6.55	0.30
124.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.84	11.47	0.03	2.93	15.62	1.27	9.39	6.77	0.30
133.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98	0.84	11.25	0.03	3.30	16.76	1.48	10.44	7.00	0.30
142.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08	0.84	11.05	0.03	3.68	17.74	1.68	11.41	7.24	0.30
151.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17	0.84	10.86	0.03	4.06	18.57	1.89	12.27	7.48	0.30
160.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	2.26	0.84	10.67	0.03	4.43	19.25	2.10	13.04	7.73	0.30

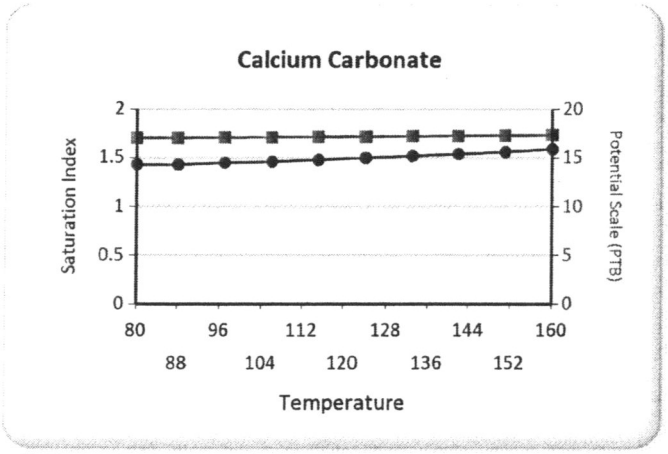
Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

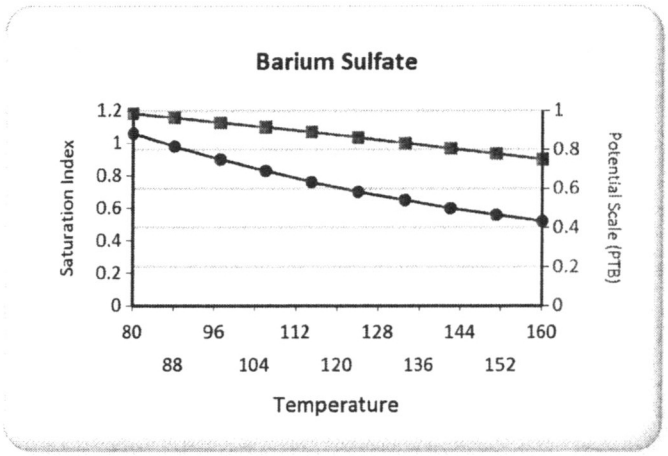
multi-chem®
A HALLIBURTON SERVICE

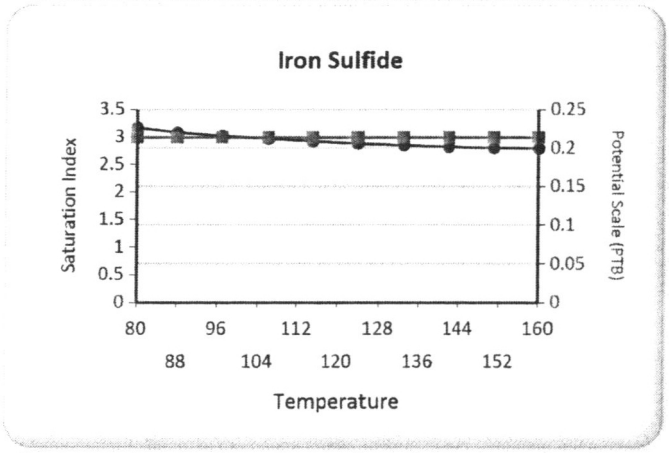
Water Analysis Report

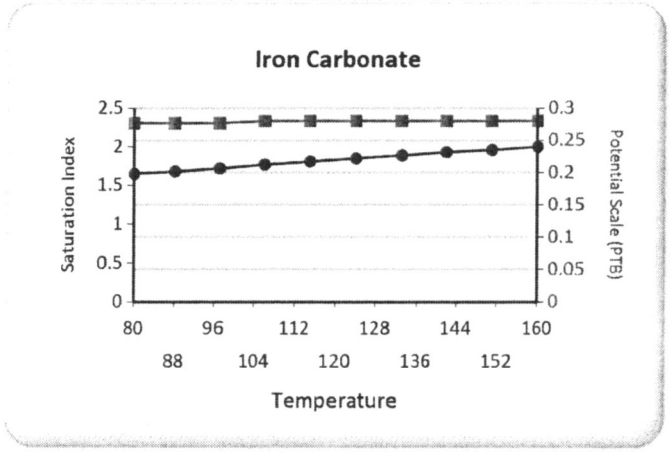
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

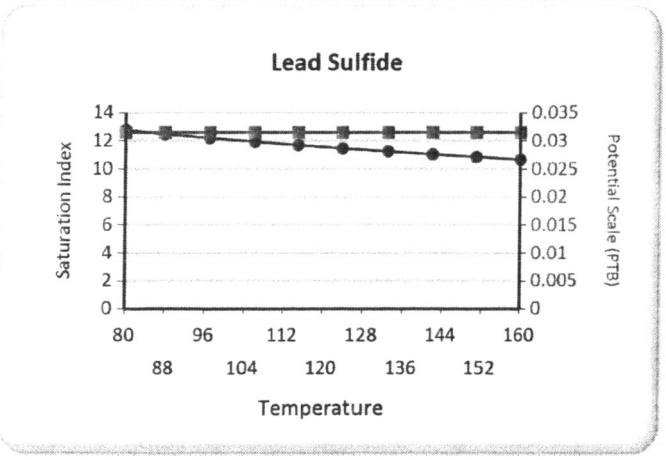
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

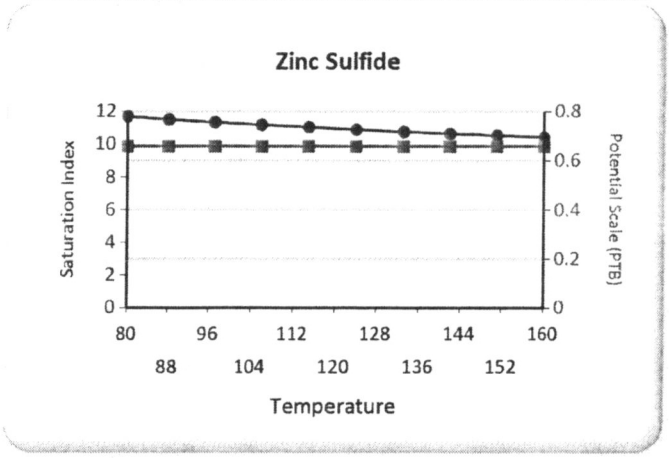


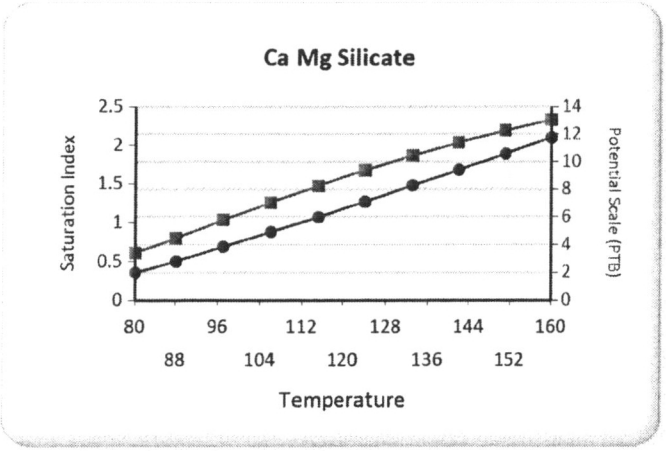


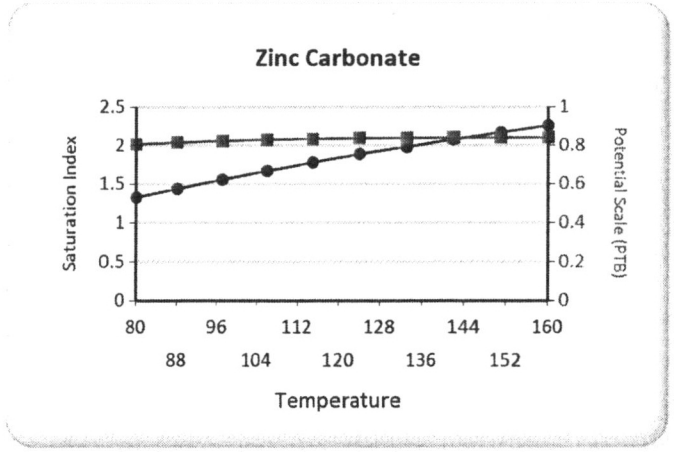


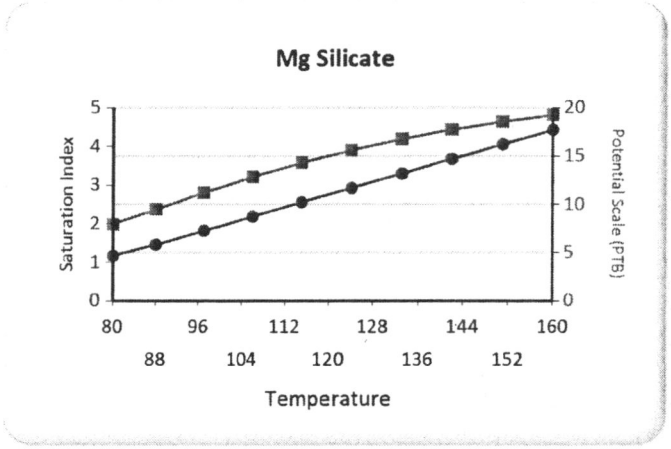


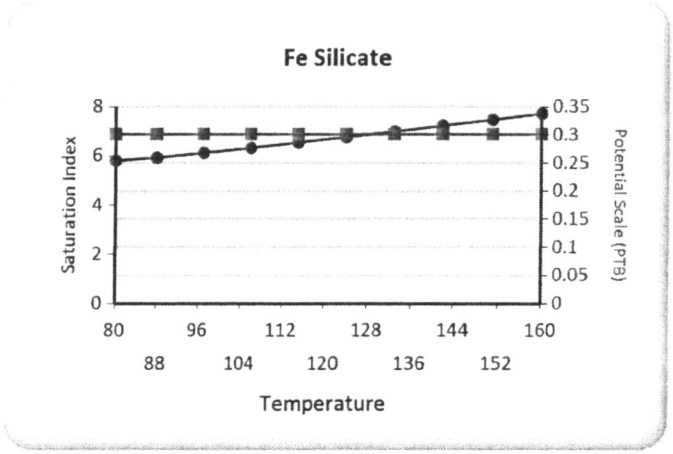





Ca Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
2.5
2
1.5
1
0.5
0
14
12
10
8
6
4
2
0
80
96
112
128
144
160
88
104
120
136
152


Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
2.5
2
1.5
1
0.5
0
1
0.8
0.6
0.4
0.2
0
80
96
112
128
144
160
88
104
120
136
152


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
5
4
3
2
1
0
20
15
10
5
0
80
96
112
128
144
160
88
104
120
136
152


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
8
6
4
2
0
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
80
96
112
128
144
160
88
104
120
136
152

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

United States Environmental Protection Agency
Washington, DC 20460

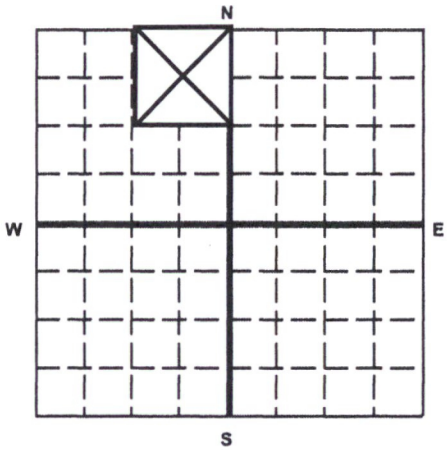
EPA

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	UT2736-04389

Surface Location Description
___ 1/4 of ___ 1/4 of NE 1/4 of NW 1/4 of Section 28 Township 5S Range 3W

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

Surface Location 520 ft. frm (N/S) N Line of quarter section
and 1983 ft. from (E/W) W 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 28-03

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	13	1704	1942	1075		0	0
February	13	1878	1965	1920		0	0
March	13	1818	1932	2261		0	0
April	13	1952	1973	2907		0	0
May	13	1979	1993	3030		0	0
June	13	1952	1978	2552		0	0
July	13	1928	1994	2481		0	0
August	13	1941	2007	2721		0	0
September	13	1926	1986	2584		0	0
October	13	1939	1964	2428		0	0
November	13	1940	1957	2257		0	0
December	13	1919	1935	1926		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 CB
TAB 2

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 28-03 INJ**
Sample Point: **Wellhead**
Sample Date: **1/8/2014**
Sample ID: **WA-262996**

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):	1.001
pH:	7.00
Calculated TDS (mg/L):	4918.47
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	0.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	1548.80	Chloride (Cl):	2000.00
Potassium (K):	18.00	Sulfate (SO_4):	549.00
Magnesium (Mg):	52.00	Bicarbonate (HCO_3):	610.00
Calcium (Ca):	108.00	Carbonate (CO_3):	
Strontium (Sr):	3.70	Acetic Acid (CH_3COO)	
Barium (Ba):	0.55	Propionic Acid (C_2H_5COO)	
Iron (Fe):	6.50	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.29	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.01	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.22	Silica (SiO_2):	21.40

Notes:
B=1.3 Al=0 Li=.16

(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	0.00	0.00	1.54	0.32	0.00	0.00	0.48	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	157.00	0.00	0.00	1.39	0.32	0.00	0.00	0.52	3.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86.00	300.00	0.01	0.61	1.27	0.31	0.00	0.00	0.62	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	443.00	0.07	4.18	1.15	0.30	0.00	0.00	0.72	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	585.00	0.13	8.12	1.06	0.30	0.00	0.00	0.82	3.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126.00	728.00	0.20	12.40	0.97	0.29	0.00	0.00	0.93	4.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	871.00	0.27	16.96	0.90	0.29	0.00	0.00	1.03	4.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	1014.00	0.35	21.76	0.84	0.28	0.00	0.00	1.13	4.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166.00	1157.00	0.43	26.75	0.79	0.27	0.00	0.00	1.23	4.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	1300.00	0.52	31.86	0.75	0.27	0.00	0.00	1.33	4.48	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

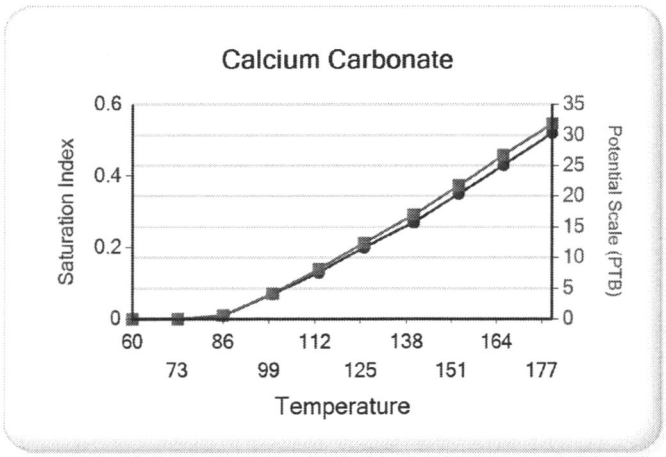
multi-chem®
A HALLIBURTON SERVICE

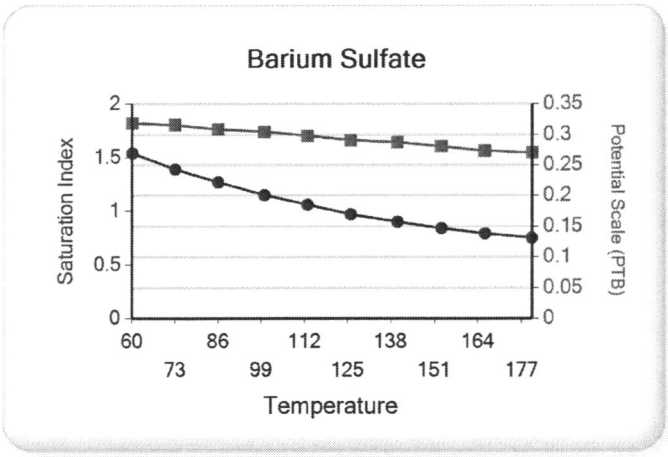
Water Analysis Report

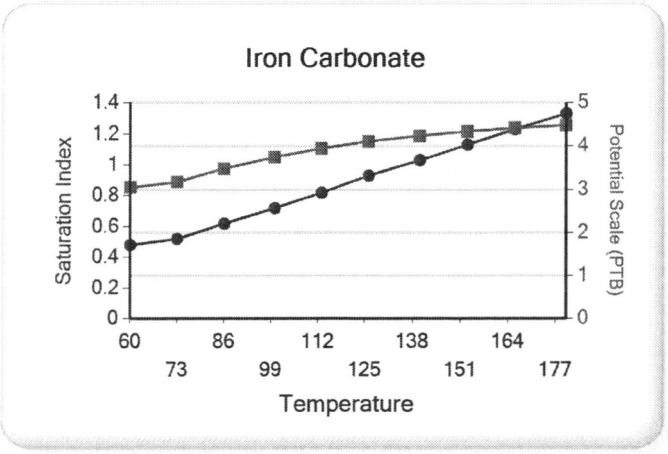
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	157.00	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	0.00	0.00
86.00	300.00	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	0.00	0.00
100.00	443.00	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	0.14	0.38
113.00	585.00	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	0.68	1.62
126.00	728.00	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	1.24	2.63
140.00	871.00	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	1.83	3.40
153.00	1014.00	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	2.43	3.96
166.00	1157.00	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	3.05	4.35
180.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	3.68	4.61

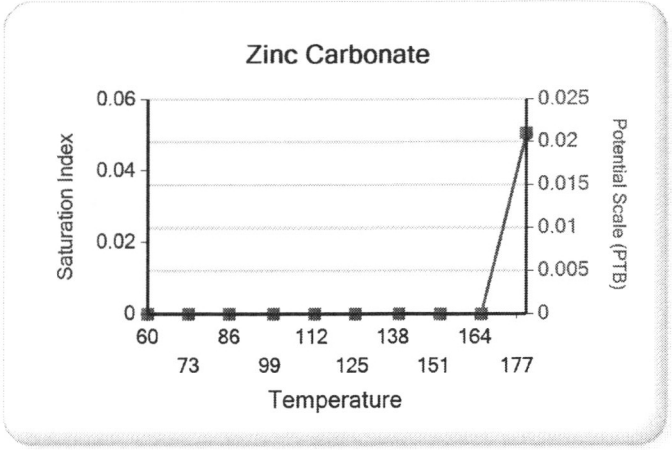
These scales have positive scaling potential under initial temperature and pressure: Barium Sulfate Iron Carbonate

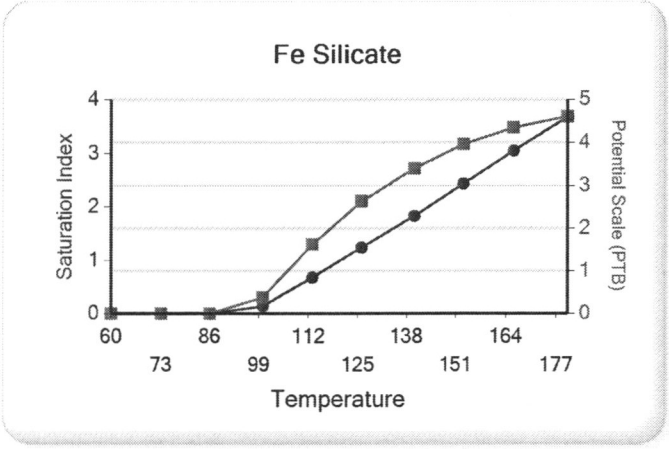
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Fe Silicate








Zinc Carbonate
Saturation Index
0.06
0.04
0.02
0
Potential Scale (PTB)
0.025
0.02
0.015
0.01
0.005
0
60
86
112
138
164
73
99
125
151
177
Temperature


Fe Silicate
Saturation Index
4
3
2
1
0
Potential Scale (PTB)
5
4
3
2
1
0
60
86
112
138
164
73
99
125
151
177
Temperature

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

SEP 10 1997

Ref: 8P2-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kathy Turner
Geology/Petroleum Engineering Technician
Petroglyph Operating Company, Inc.
P. O. Box 1839
Hutchinson, KS 67504-1839

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Ute Tribal #28-03 (UT04389)
Antelope Creek Waterflood
EPA Area Permit No. UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, fracture treatment reports showing average ISIP of 2336 psi, and the successfully run mechanical integrity test, with chart, on the Ute Tribal #28-03 (UT2736-04389) have been reviewed and approved. Petroglyph Operating Company, Inc., has complied with all of the pertinent permit conditions (Part II, Section C. 2.) for the Antelope Creek Waterflood Area Permit.

Pleased be advised that administrative approval has been granted for injection of Class II fluids into the above referenced well for enhanced recovery of oil and gas. Please also be aware of the monitoring, recordkeeping and reporting requirements described in Part II, Section D of the permit and that the current **maximum surface injection pressure (Pmax) is limited to 2336 psig**, as modified by UIC Minor Permit Modification dated August 8, 1997.

Upon receipt of this letter, the Compliance Officer, Mr. John Carson will then take over routine matters involving well operations, future correspondence, forms, and reports. Please direct all correspondence to the attention of Mr. Carson at the above letterhead **(MAIL CODE ENF-T)** or contact Mr. Carson at (303) 312-6203. Thank you for your continued cooperation.

Sincerely,

D. Edwin Hogle
Director, Groundwater Program
Office of Pollution Prevention
State and Tribal Assistance

Printed on Recycled Paper

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

SEP 10 1997

Scan under
UT 20736 - 04389
Authorization to
Inject - Final

ED

neering Technician
ompany, Inc.

.839

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Ute Tribal #28-03 (UT04389)
Antelope Creek Waterflood
EPA Area Permit No. UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, fracture treatment reports showing average ISIP of 2336 psi, and the successfully run mechanical integrity test, with chart, on the Ute Tribal #28-03 (UT2736-04389) have been reviewed and approved. Petroglyph Operating Company, Inc., has complied with all of the pertinent permit conditions (Part II, Section C. 2.) for the Antelope Creek Waterflood Area Permit.

Pleased be advised that administrative approval has been granted for injection of Class II fluids into the above referenced well for enhanced recovery of oil and gas. Please also be aware of the monitoring, recordkeeping and reporting requirements described in Part II, Section D of the permit and that the current **maximum surface injection pressure (Pmax) is limited to 2336 psig**, as modified by UIC Minor Permit Modification dated August 8, 1997.

Upon receipt of this letter, the Compliance Officer, Mr. John Carson will then take over routine matters involving well operations, future correspondence, forms, and reports. Please direct all correspondence to the attention of Mr. Carson at the above letterhead **(MAIL CODE ENF-T)** or contact Mr. Carson at (303) 312-6203. Thank you for your continued cooperation.

Sincerely,

D. Edwin Hogle
Director, Groundwater Program
Office of Pollution Prevention
State and Tribal Assistance

Printed on Recycled Paper

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee
Ute Indian Tribe

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Mr. Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Gil Hunt
State of Utah Natural Resources
Division of Oil, Gas, and Mining

Mr. Jerry Kenczka
BLM - Vernal District Office

9/11/97 CW 3113C

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

SEP 11 1997

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Kathy Turner
Geology/Petroleum Engineering Technician
Petroglyph Operating Company, Inc.
P.O. Box 1839
Hutchinson, KS 67504-1839

4a. Article Number
P 164 014 344

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
SEP 15 1997

5. Received By: *(Print Name)*
Gail Dennis

8. Addressee's Address *(Only if requested and fee is paid)*
SEP 18 1997

6. Signature: *(Addressee or Agent)*
X Gail Dennis

PS Form **3811**, December 1994

Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

F

9/11/97 CW 3113C
P 164 014 344

#28-0

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Ms. Kathy Turner	
Street & Number Geology/Petroleum Engineering Technician	
Post Office, State, & ZIP Code Petroglyph Operating Company, P.O. Box 1839	
Postage Hutchinson, KS 67504-1839	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

CONCURRENCE COPY

SEP 10 1997

Ref: 8P2-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kathy Turner
Geology/Petroleum Engineering Technician
Petroglyph Operating Company, Inc.
P. O. Box 1839
Hutchinson, KS 67504-1839

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Ute Tribal #28-03 (UT04389)
Antelope Creek Waterflood
EPA Area Permit No. UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, fracture treatment reports showing average ISIP of 2336 psi, and the successfully run mechanical integrity test, with chart, on the Ute Tribal #28-03 (UT2736-04389) have been reviewed and approved. Petroglyph Operating Company, Inc, has complied with all of the pertinent permit conditions (Part II, Section C. 2.) for the Antelope Creek Waterflood Area Permit.

Pleased be advised that administrative approval has been granted for injection of Class II fluids into the above referenced well for enhanced recovery of oil and gas. Please also be aware of the monitoring, recordkeeping and reporting requirements described in Part II, Section D of the permit and that the current **maximum surface injection pressure (Pmax) is limited to 2336 psig**, as modified by UIC Minor Permit Modification dated August 8, 1997.

Upon receipt of this letter, the Compliance Officer, Mr. John Carson will then take over routine matters involving well operations, future correspondence, forms, and reports. Please direct all correspondence to the attention of Mr. Carson at the above letterhead **(MAIL CODE ENF-T)** or contact Mr. Carson at (303) 312-6203. Thank you for your continued cooperation.

Sincerely,

CEW
8P2-W-GW
9/5/97

8P2-W-GW
9/5/97

Hogle
8P2-W-GW
9/9/97

D. Edwin Hogle
Director, Groundwater Program
Office of Pollution Prevention
State and Tribal Assistance

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee
Ute Indian Tribe

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Mr. Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Gil Hunt
State of Utah Natural Resources
Division of Oil, Gas, and Mining

Mr. Jerry Kenczka
BLM - Vernal District Office

FCD: September 5, 1997, Chuck W., F:\DATA\WP\PETROGLF\AUT-IN28.03