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

Ref: 8P2-W-GW

MAY 8 1998

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

RE: **UNDERGROUND INJECTION CONTROL (UIC)**
Conversion of Additional Well to
Antelope Creek Waterflood
EPA Area Permit UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Your letter of December 22, 1997, requesting that the following production well be converted to a Class II enhanced oil recovery well and added to the Antelope Creek Waterflood, as authorized under the **Modified EPA Area Permit #UT2736-00000** is hereby granted.

NAME	LOCATION	EPA WELL PERMIT NO.
Ute Tribal #33-10D3	NW/SE Section 33 T 4 S - R 3 W Duchesne County, UT	*#UT2736-04421*

This additional well is within the boundary of the recently modified area permit for the Antelope Creek Waterflood (UT2736-00000), and this addition is made by modification under the authority of 40 CFR § 144.33 (c) and according to the terms and conditions of that permit. Unless specifically mentioned in this Modification, all terms and conditions of the modified permit will apply to the construction, operation, monitoring, and plugging and abandonment of this additional injection well. The proposed well location, well schematic, conversion procedures, plugging and abandonment plan and schematic, submitted by your office, have been reviewed and approved as follows:

(1) The **conversion** of this production well has been reviewed, and found satisfactory, therefore, no corrective action is required.

(2) **Maximum injection pressure (Pmax)** - the permittee shall limit the maximum surface injection pressure (Pmax) to 2448 psig. Permit provision have been made that allow the operator to request an increase or decrease in the injection pressure.

Printed on Recycled Paper

The fracture gradient (0.98 psi/ft.), in calculating Pmax was estimated from the average of the two offset permitted injection wells: Ute Tribal #33-08D3 and Ute Tribal #33-16D3. This Fg is acceptable to the Environmental Protection Agency (EPA), and a theoretical maximum allowable surface injection pressure (Pmax), for this well, may be calculated as shown below:

Pmax = [Fg - 0.433 (Sg)] d

Where: Pmax = Maximum surface injection pressure at wellhead

d = 4476' shallowest perforations after conversion

Sg = Specific gravity of injected water

Pmax = [0.98 - .433 (1.00)] 4476

Pmax = 2448 psig

Until such time as the permittee demonstrates that a fracture gradient other than 0.98 psi/ft applies to the disposal zones of this newly converted well, the maximum allowable wellhead injection pressure **(Pmax) for this well will be 2448 psig.**

(3) The **plugging and abandonment plan and schematic**, submitted by your office, has been reviewed, and approved.

Prior to commencing injection into this well, permittee must fulfill permit condition Part II, C. 2. and have received **separate written authorization to inject by the Environmental Protection Agency**. In summary, these requirements for your newly permitted injection well are:

(1) All conversion is complete and the permittee has submitted a completed **Well Rework Record (EPA Form 7520-12)**.

(2) The **pore pressure has been determined.**

(3) The well has successfully completed and passed a **mechanical integrity test (MIT)**; EPA form enclosed.

All other provisions and conditions of the permit remain as originally issued.

If you have any questions, please contact Mr. Chuck Williams at (303) 312-6625. Also, please direct the above requirements to Mr. Williams at the above letterhead address, citing **MAIL CODE 8P2-W-GW**. Thank you for your continued cooperation.

Sincerely,

for Stephen A. Tuber

Kerrigan G. Clough
Assistant Regional Administrator
Office of Pollution Prevention,
State and Tribal Assistance

Enclosure: EPA Form

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

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Jerry Kenczka
BLM - Vernal District Office

Mr. Gilbert Hunt
State of Utah Natural Resources
Division of Oil, Gas & Mining

Mechanical Integrity Test
Casing or Annulus Pressure Test for Well UT2736-04421

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Implementation Section, 8WM-DW
999 18th Street, Suite 500, Denver, CO 80202-2466
This form was printed on 04/28/1998.

EPA Witness: _____ Date __/__/__

Test conducted by: _____

Others present: _____

UTE TRIBAL #33-10D3 2R UC as of / /
ANTELOPE CREEK NWSE 33 04S 03W
Petroglyph Operating Company, Inc., Hutchinson, KS Op ID PTG01

Last MIT: No record / /
Max Allowed Press psig 199' Max Reported Press 0 psig

Is this a regularly scheduled test? [ ] Yes [ ] No
Initial test for permit? [ ] Yes [ ] No
Test after well rework? [ ] Yes [ ] No

Well injecting during test? [ ] NO [ ] YES _____ BPD

Initial casing/tubing annulus pressure _____ psig
Does the annulus pressure build back up? [ ] Yes [ ] No

TUBING PRESSURE			
Initial	psig	psig	psig
End of Test	psig	psig	psig
CASING/TUBING ANNULUS PRESSURE			
Time	Test #1	Test #2	Test #3
0 min	psig	psig	psig
5			
10			
15 min			
20			
25			
30 min			
Result (circle)	Pass Fail	Pass Fail	Pass Fail

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

EPA

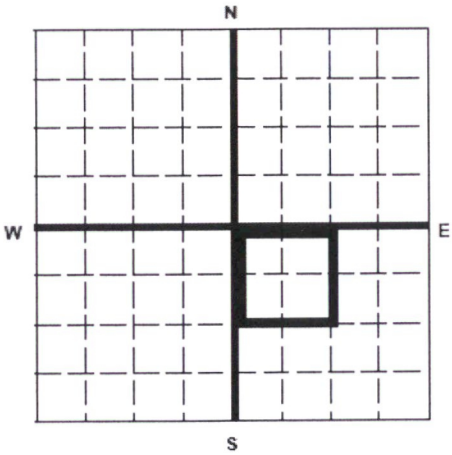
United States Environmental Protection Agency
Washington, DC 20460

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	UT2736-04421

Surface Location Description
____ 1/4 of 1/4 of NW 1/4 of SE 1/4 of Section 33 Township 4S Range 3W

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

Surface Location 1979 ft. frm (N/S) S Line of quarter section
and 1980 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 33-10-D3

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	16	2059	2079	5559		0	0
February	16	2097	2100	6841		0	0
March	16	2110	2115	7291		0	0
April	16	2072	2092	5835		0	0
May	16	2097	2108	7398		0	0
June	16	2081	2110	5711		0	0
July	16	2044	2063	4557		0	0
August	16	2034	2046	4705		0	0
September	16	2028	2040	4564		0	0
October	16	2040	2049	5873		0	0
November	16	2018	2040	4780		0	0
December	16	2033	2042	4841		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 4/7/17
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 33-10D3 INJ, DUCHESNE**	Lab Tech:	**Kaitlyn Natelli**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2017**		
Sample ID:	**WA-345342**		

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):	1.0052
pH:	8.90
Calculated TDS (mg/L):	11524.08
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	10.00
Tot. SuspendedSolids(mg/L):	
Corrosivity(LanglierSat.Indx)	0.00
Alkalinity:	

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	3956.07	Chloride (Cl):	4500.00
Potassium (K):	40.45	Sulfate (SO_4):	10.00
Magnesium (Mg):	5.64	Bicarbonate (HCO_3):	2928.00
Calcium (Ca):	14.75	Carbonate (CO_3):	
Strontium (Sr):	4.59	Hydroxide(HO):	
Barium (Ba):	29.36	Acetic Acid (CH_3COO)	
Iron (Fe):	6.98	Propionic Acid (C_2H_5COO)	
Zinc (Zn):	0.62	Butanoic Acid (C_3H_7COO)	
Lead (Pb):	0.08	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Ammonia NH_3:		Fluoride (F):	
Manganese (Mn):	0.20	Bromine (Br):	
Aluminum (Al):	0.09	Silica (SiO_2):	27.34
Lithium (Li):	4.41	Calcium Carbonate ($CaCO_3$):	
Boron (B):	7.88	Phosphates (PO_4):	15.26
Silicon (Si):	12.78	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	1.66	12.60	0.72	6.03	4.26	3.85	3.43	5.08	0.00	0.00	0.00	0.00	0.00	0.00	10.73	0.32
149.00	267.00	1.70	12.64	0.62	5.53	4.19	3.85	3.52	5.08	0.00	0.00	0.00	0.00	0.00	0.00	10.46	0.32
168.00	483.00	1.76	12.67	0.55	5.09	4.15	3.85	3.60	5.08	0.00	0.00	0.00	0.00	0.00	0.00	10.22	0.32
187.00	700.00	1.83	12.71	0.49	4.72	4.13	3.85	3.68	5.08	0.00	0.00	0.00	0.00	0.00	0.00	10.01	0.32
206.00	917.00	1.91	12.74	0.45	4.43	4.13	3.85	3.75	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.83	0.32
224.00	1133.00	2.00	12.77	0.42	4.22	4.15	3.85	3.82	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.66	0.32
243.00	1350.00	2.09	12.80	0.40	4.10	4.19	3.85	3.88	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.52	0.32
262.00	1567.00	2.19	12.82	0.39	4.05	4.23	3.85	3.94	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.39	0.32
281.00	1783.00	2.29	12.84	0.40	4.07	4.29	3.85	3.99	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.28	0.32
300.00	2000.00	2.39	12.85	0.41	4.14	4.36	3.85	4.03	5.08	0.00	0.00	0.00	0.00	0.00	0.00	9.18	0.32

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

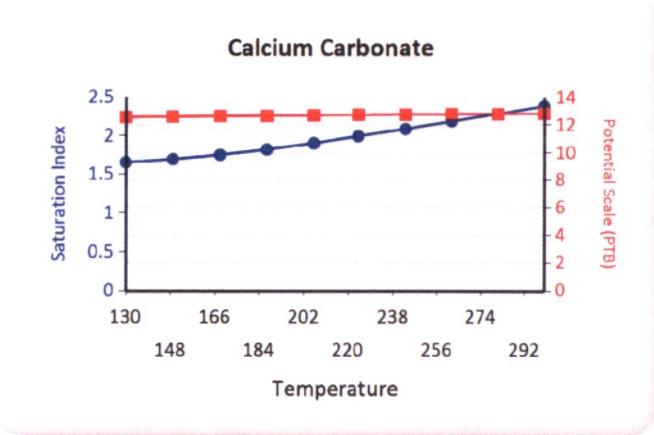
multi-chem®
A HALLIBURTON SERVICE

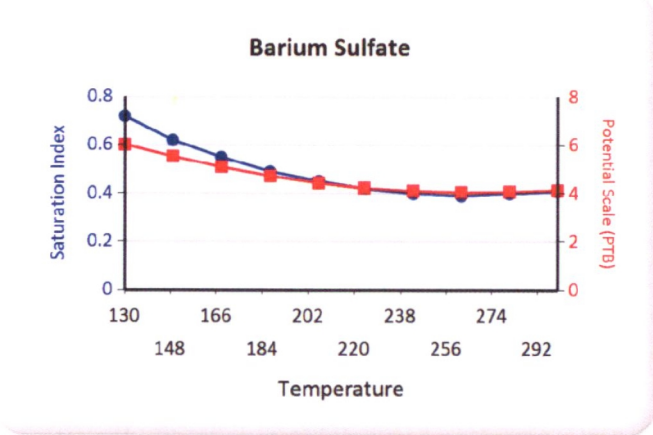
Water Analysis Report

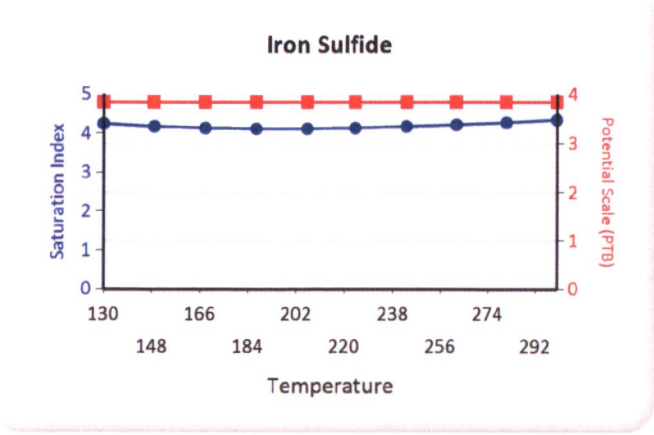
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.41	11.55	0.03	5.15	11.03	2.99	17.40	13.36	5.43
149.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20	0.41	11.10	0.03	5.83	11.13	3.35	17.53	13.75	5.43
168.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	2.38	0.41	10.71	0.03	6.52	11.19	3.71	17.58	14.17	5.43
187.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.42	10.35	0.03	7.19	11.22	4.07	17.60	14.59	5.43
206.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	2.68	0.42	10.03	0.03	7.84	11.24	4.43	17.61	15.02	5.43
224.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81	0.42	9.75	0.03	8.48	11.25	4.79	17.61	15.45	5.43
243.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	2.92	0.42	9.49	0.03	9.10	11.26	5.13	17.61	15.87	5.43
262.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	0.42	9.26	0.03	9.69	11.26	5.47	17.61	16.29	5.43
281.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	0.42	9.05	0.03	10.25	11.27	5.80	17.61	16.69	5.43
300.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15	0.42	8.86	0.03	10.79	11.27	6.11	17.61	17.08	5.43

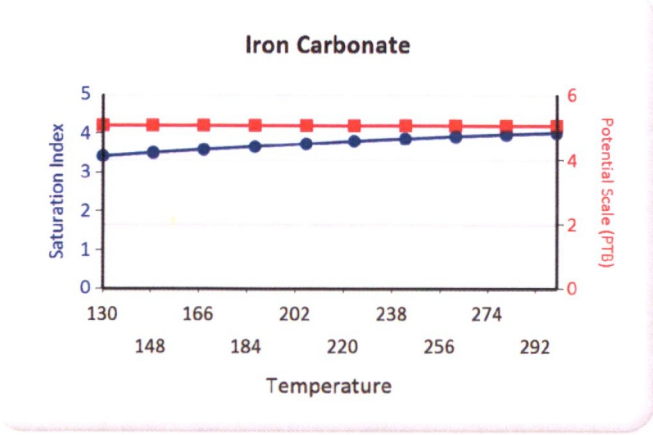
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

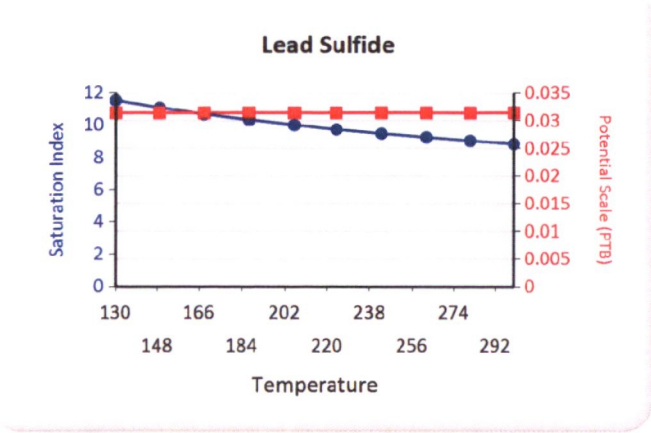
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

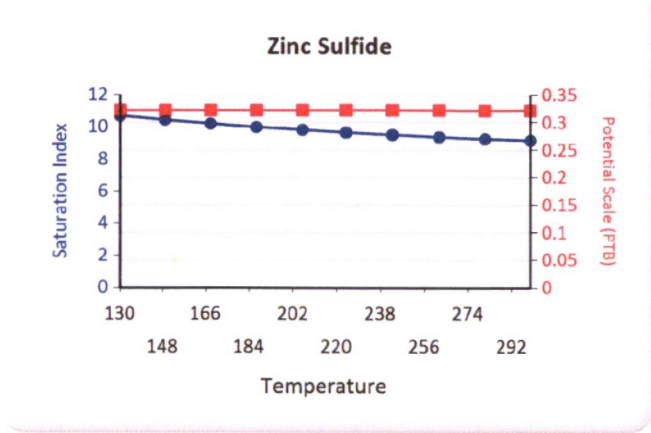


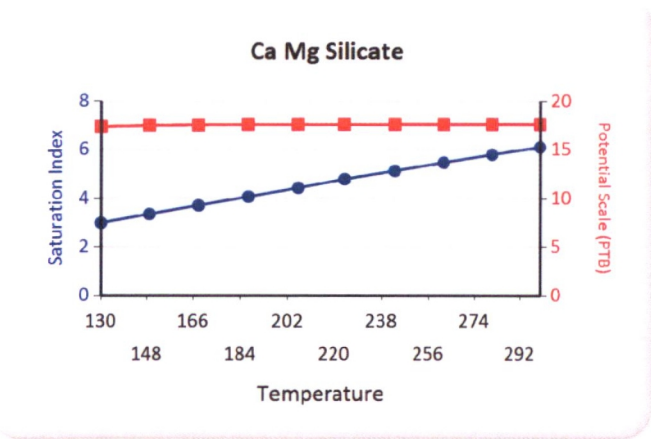


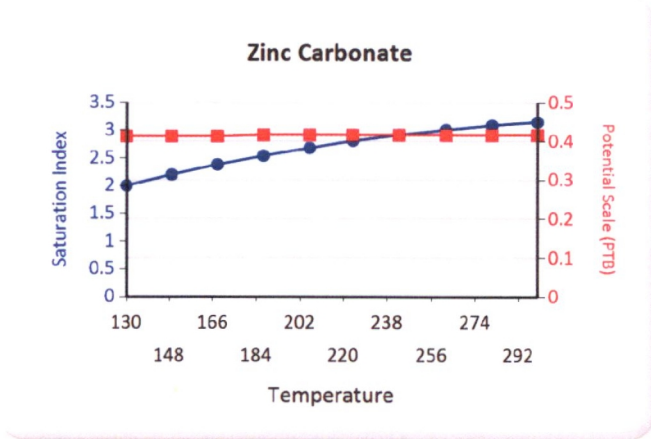


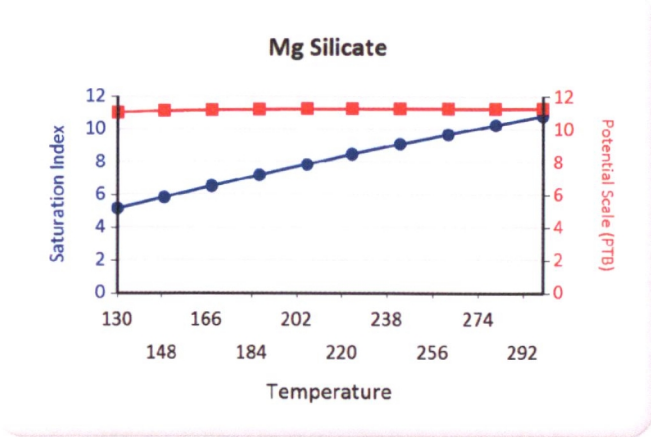


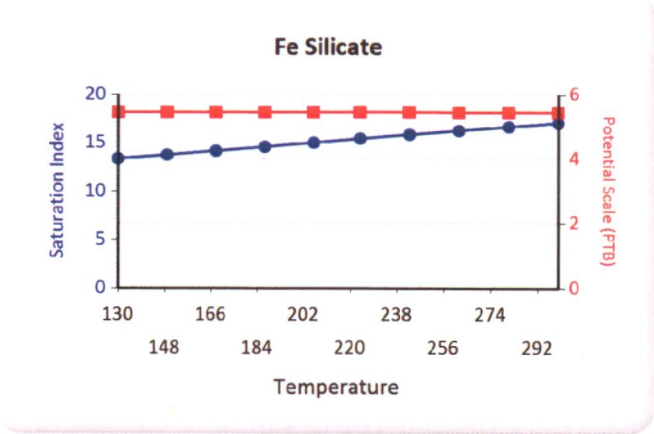

Lead Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
130 166 202 238 274
148 184 220 256 292


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


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


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


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


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
20
15
10
5
0
6
4
2
0
130
148
166
184
202
220
238
256
274
292

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

EPA

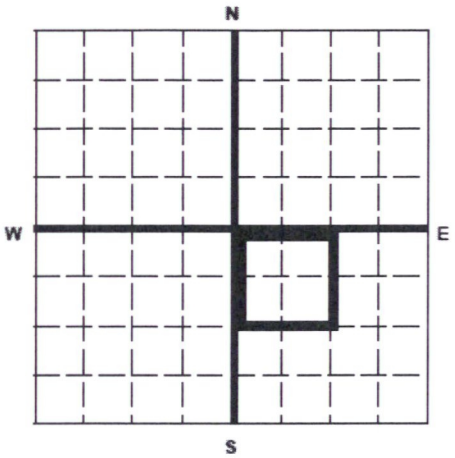
United States Environmental Protection Agency
Washington, DC 20460

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~~ 04421

Surface Location Description
___ 1/4 of ___ 1/4 of NW 1/4 of SE 1/4 of Section 33 Township 4S Range 3W

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

Surface Location 1979 ft. frm (N/S) S Line of quarter section
and 1980 ft. from (E/W) E Line of quarter section.

U2 Entered
Date 3/3/16
Initial BB

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 33-10-D3

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	15	2033	2053	6231		0	0
February	15	2053	2071	6568		0	0
March	15	2061	2071	6980		0	0
April	15	2047	2063	6285		0	0
May	15	2067	2078	7020		0	0
June	15	2069	2079	6830		0	0
July	15	2077	2084	7066		0	0
August	15	2048	2055	5395		0	0
September	15	2073	2080	6481		0	0
October	15	2090	2097	7340		0	0
November	15	2092	2094	7267		0	0
December	15	2082	2102	7223		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

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

TAB | GREEN | BLUE | CBL
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 33-10D3 INJ, DUCHESNE**	Lab Tech:	**Michele Pike**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2016**		
Sample ID:	**WA-327699**		

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

Sample Specifics

Test Date:	1/14/2016
System Temperature 1 (°F):	60
System Pressure 1 (psig):	2000
System Temperature 2 (°F):	180
System Pressure 2 (psig):	50
Calculated Density (g/ml):	1.0022
pH:	7.10
Calculated TDS (mg/L):	6958.99
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	80.00
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):	2223.87	Chloride (Cl):	3000.00
Potassium (K):	5.09	Sulfate (SO_4):	490.00
Magnesium (Mg):	70.85	Bicarbonate (HCO_3):	976.00
Calcium (Ca):	158.99	Carbonate (CO_3):	
Strontium (Sr):	4.74	Acetic Acid (CH_3COO)	
Barium (Ba):	0.83	Propionic Acid (C_2H_5COO)	
Iron (Fe):	1.36	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.45	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.61	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.02	Silica (SiO_2):	26.18
Aluminum (Al):	0.08	Calcium Carbonate ($CaCO_3$):	
Lithium (Li):	1.13	Phosphates (PO_4):	3.51
Boron (B):	0.02	Oxygen (O_2):	
Silicon (Si):	12.24		

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	1.02	84.72	0.75	0.41	0.00	0.00	1.09	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	267.00	0.85	72.50	0.77	0.41	0.00	0.00	0.90	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	483.00	0.75	64.26	0.80	0.42	0.00	0.00	0.77	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	700.00	0.64	56.04	0.84	0.42	0.00	0.00	0.64	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.00	917.00	0.55	47.99	0.89	0.43	0.00	0.00	0.50	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	1133.00	0.46	40.22	0.95	0.44	0.00	0.00	0.37	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1350.00	0.37	32.86	1.03	0.45	0.00	0.00	0.25	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	1567.00	0.29	26.00	1.12	0.46	0.00	0.00	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1783.00	0.22	19.73	1.22	0.47	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	0.16	14.11	1.35	0.47	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

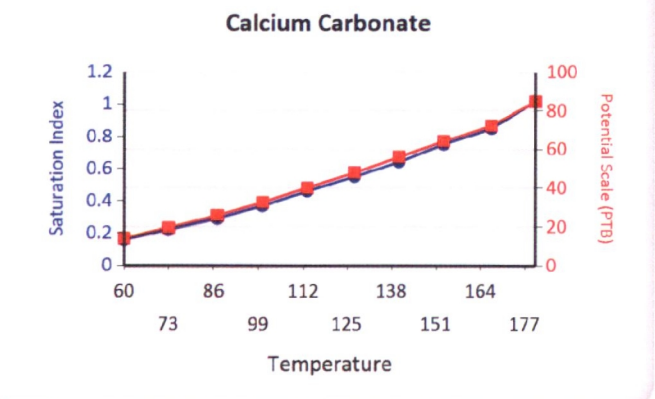
multi-chem®
A HALLIBURTON SERVICE

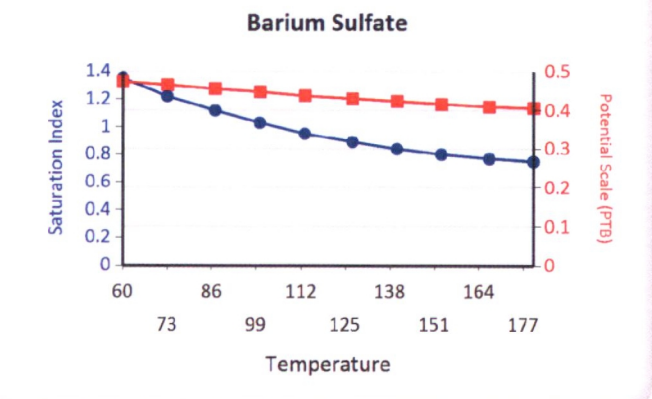
Water Analysis Report

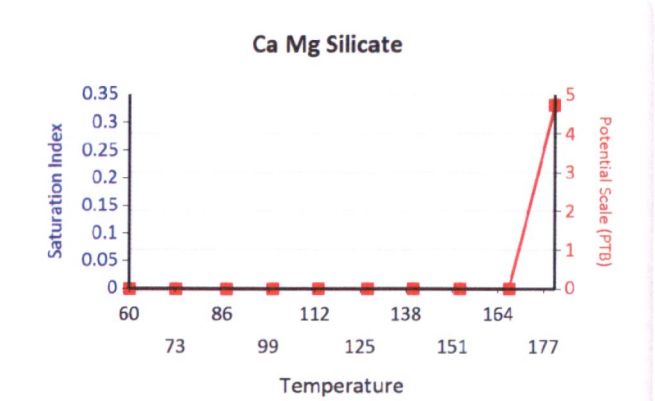
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.22	0.00	0.00	1.44	20.84	0.33	4.74	3.47	0.98
167.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.16	0.00	0.00	0.29	4.13	0.00	0.00	2.47	0.89
153.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.09	0.00	0.00	0.00	0.00	0.00	0.00	1.81	0.79
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	1.17	0.61
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	0.54	0.35
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

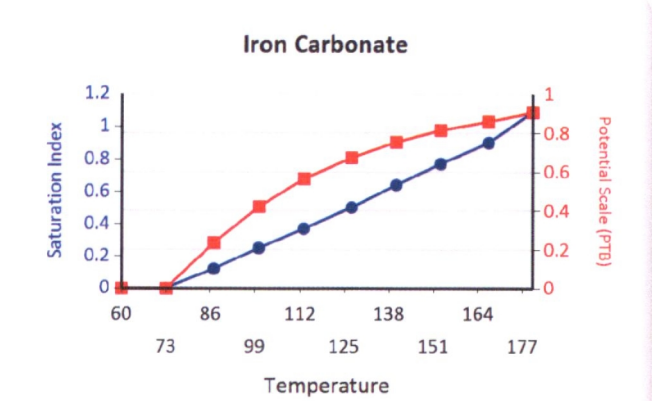
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

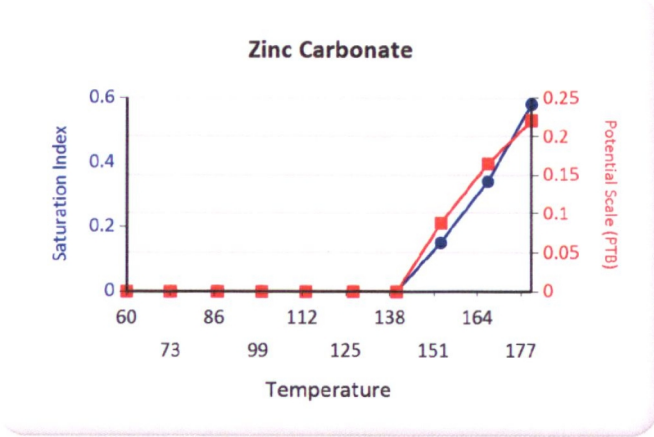
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate

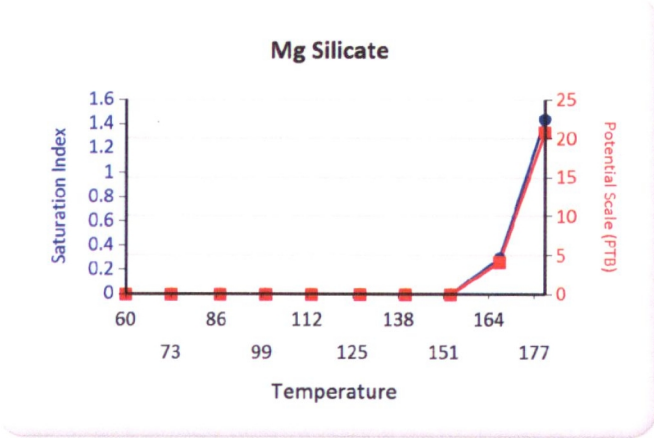


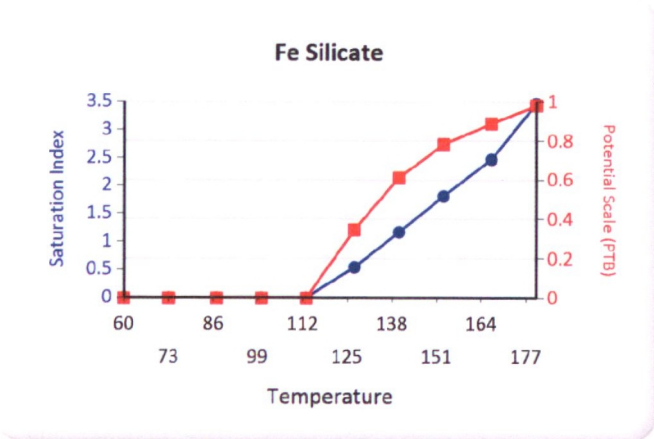







Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
0.6
0.4
0.2
0
0.25
0.2
0.15
0.1
0.05
0
60
86
112
138
164
73
99
125
151
177


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
25
20
15
10
5
0
60
86
112
138
164
73
99
125
151
177


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
3.5
3
2.5
2
1.5
1
0.5
0
1
0.8
0.6
0.4
0.2
0
60
86
112
138
164
73
99
125
151
177

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

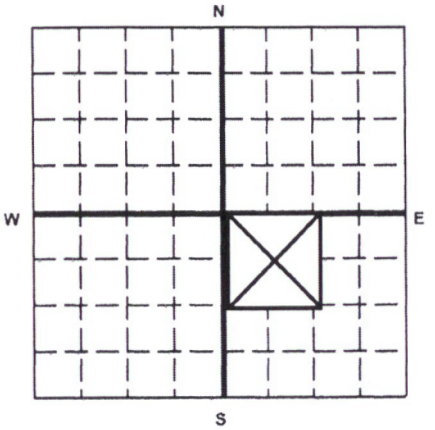
EPA

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	UT2736-04421

Surface Location Description

___ 1/4 of ___ 1/4 of NW 1/4 of SE 1/4 of Section 33 Township 4S Range 3W

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

Surface Location 1979 ft. frm (N/S) S Line of quarter section and 1980 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 33-10-D3

		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	1995	1999	5185		0	0
February	14	1970	2010	3363		0	0
March	14	2012	2039	5852		0	0
April	14	2035	2040	5823		0	0
May	14	2027	2041	4127		0	0
June	14	2046	2045	6433		0	0
July	14	2010	2048	5287		0	0
August	14	2042	2041	7056		0	0
September	14	2016	2049	5688		0	0
October	14	2050	2054	7083		0	0
November	14	2061	2073	7051		0	0
December	14	2054	2066	7134		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 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 33-10D3 INJ, DUCHESNE**	Lab Tech:	**Gary Winegar**
Sample Point:	**WELLHEAD**		
Sample Date:	**1/7/2015**		
Sample ID:	**WA-297430**		

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):	0.9985
pH:	6.50
Calculated TDS (mg/L):	2047.18
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	16.00
H_2S in Gas (%):	
H2S in Water (mg/L):	5.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	158.91	Chloride (Cl):	1000.00
Potassium (K):	1.64	Sulfate (SO_4):	276.00
Magnesium (Mg):	71.91	Bicarbonate (HCO_3):	366.00
Calcium (Ca):	142.19	Carbonate (CO_3):	
Strontium (Sr):	4.26	Acetic Acid (CH_3COO)	
Barium (Ba):	0.37	Propionic Acid (C_2H_5COO)	
Iron (Fe):	1.24	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.77	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.00	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.11	Silica (SiO_2):	23.78

Notes:
B=.68 Al=0 Li=.2

(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	1.12	0.20	0.70	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.79	0.40
88.00	157.00	0.00	0.00	1.04	0.20	0.55	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.53	0.40
97.00	300.00	0.00	0.00	0.96	0.20	0.54	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.40
106.00	443.00	0.00	0.00	0.89	0.19	0.54	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.32	0.40
115.00	585.00	0.00	0.00	0.83	0.19	0.55	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.40
124.00	728.00	0.00	0.00	0.77	0.18	0.56	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.14	0.40
133.00	871.00	0.00	0.00	0.72	0.18	0.58	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.06	0.40
142.00	1014.00	0.00	0.00	0.68	0.18	0.61	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.99	0.40
151.00	1157.00	0.00	0.00	0.64	0.17	0.64	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.40
160.00	1300.00	0.00	0.00	0.61	0.16	0.67	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.87	0.40

		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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

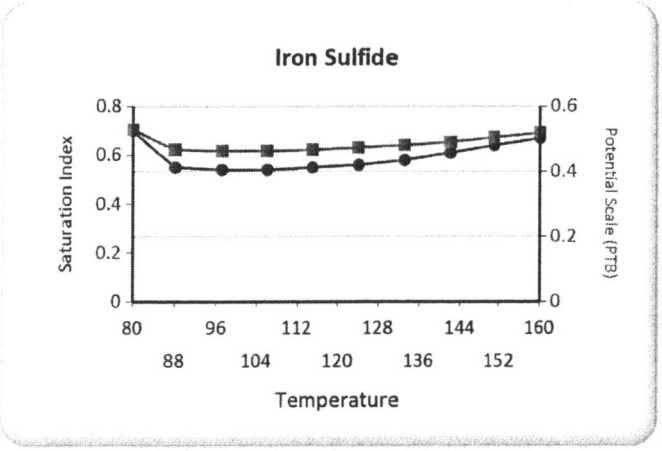
Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

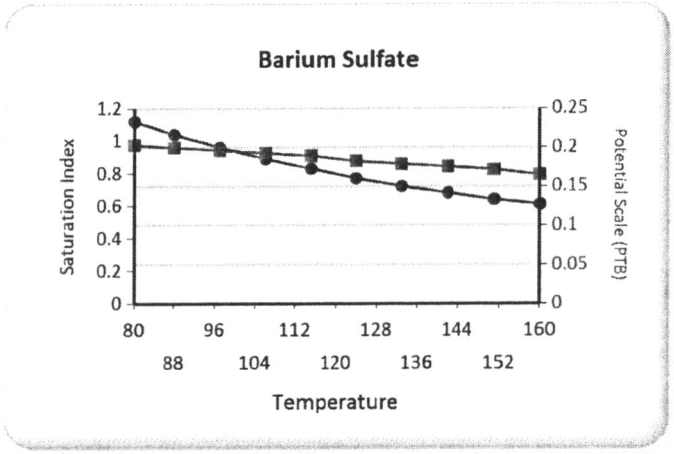
multi-chem®
A HALLIBURTON SERVICE

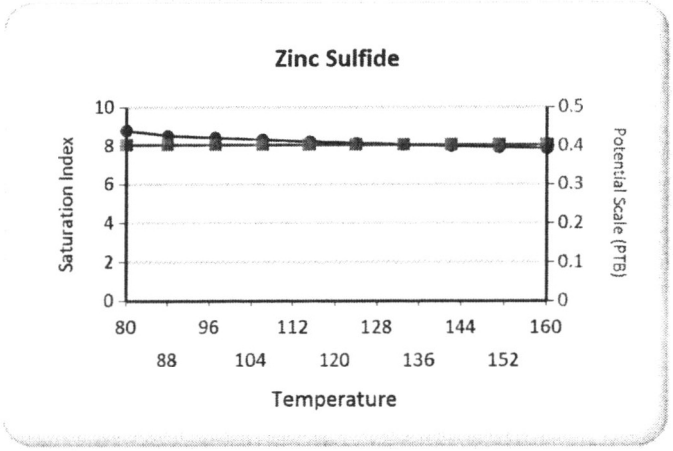
Water Analysis Report

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

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







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

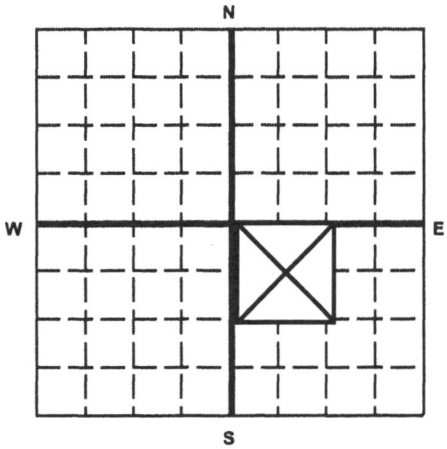
United States Environmental Protection Agency
Washington, DC 20460

EPA

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee	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	UT2736-04421

Surface Location Description

[ ] 1/4 of [ ] 1/4 of NW 1/4 of SE 1/4 of Section 33 Township 4S Range 3W

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

Surface Location 1979 ft. frm (N/S) S Line of quarter section
and 1980 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY	TYPE OF PERMIT
[ ] Brine Disposal	[ ] Individual
[X] Enhanced Recovery	[X] Area
[ ] Hydrocarbon Storage	Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 33-10-D3

		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	1958	1979	5945		0	0
February	13	1962	1988	4812		0	0
March	13	1966	1988	5078		0	0
April	13	1997	2005	6193		0	0
May	13	1978	2000	4028		0	0
June	13	1962	1997	2035		0	0
July	13	1997	2024	3635		0	0
August	13	1959	2004	2980		0	0
September	13	1985	2013	4264		0	0
October	13	1988	2032	4653		0	0
November	13	1980	1990	4623		0	0
December	13	1967	1991	3782		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	[signature]	2/11/2014

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

TAB	GREEN	BLUE	CBC
		2	

U2 Entered
Date 3/21/14
Initial JB

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 33-10D3 INJ**
Sample Point: **Wellhead**
Sample Date: **1/8/2014**
Sample ID: **WA-263017**

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):	1.007
pH:	8.30
Calculated TDS (mg/L):	13779.74
CO2 in Gas (%):	
Dissolved CO2 (mg/L)):	0.00
H2S in Gas (%):	
H2S in Water (mg/L):	0.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	5051.70	Chloride (Cl):	7000.00
Potassium (K):	58.00	Sulfate (SO_4):	4.00
Magnesium (Mg):	9.00	Bicarbonate (HCO_3):	1586.00
Calcium (Ca):	22.00	Carbonate (CO_3):	
Strontium (Sr):	5.00	Acetic Acid (CH_3COO)	
Barium (Ba):	18.00	Propionic Acid (C_2H_5COO)	
Iron (Fe):	1.80	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.39	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.07	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.24	Silica (SiO_2):	23.54

Notes:
B=5.3 Al=0 Li=1.3

(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	0.91	15.24	0.59	2.30	0.00	0.00	1.59	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	157.00	0.92	15.23	0.45	1.93	0.00	0.00	1.65	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86.00	300.00	0.94	15.45	0.32	1.51	0.00	0.00	1.72	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	443.00	0.97	15.69	0.21	1.07	0.00	0.00	1.79	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	585.00	1.00	15.95	0.11	0.60	0.00	0.00	1.86	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126.00	728.00	1.03	16.22	0.02	0.14	0.00	0.00	1.92	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	871.00	1.07	16.51	0.00	0.00	0.00	0.00	1.99	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	1014.00	1.11	16.78	0.00	0.00	0.00	0.00	2.05	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166.00	1157.00	1.15	17.06	0.00	0.00	0.00	0.00	2.11	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	1300.00	1.20	17.31	0.00	0.00	0.00	0.00	2.17	1.30	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

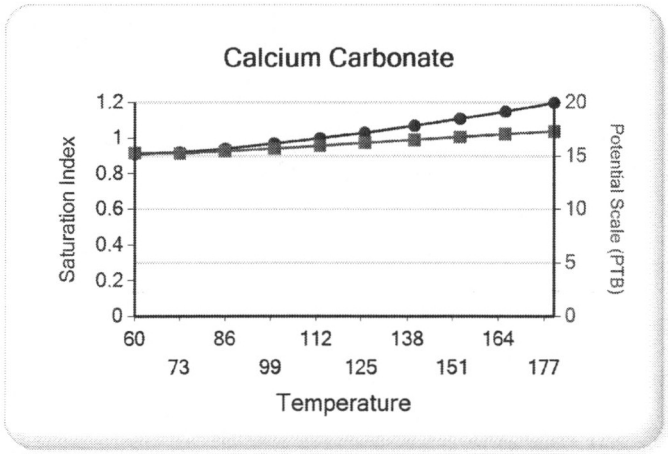
multi-chem®
A HALLIBURTON SERVICE

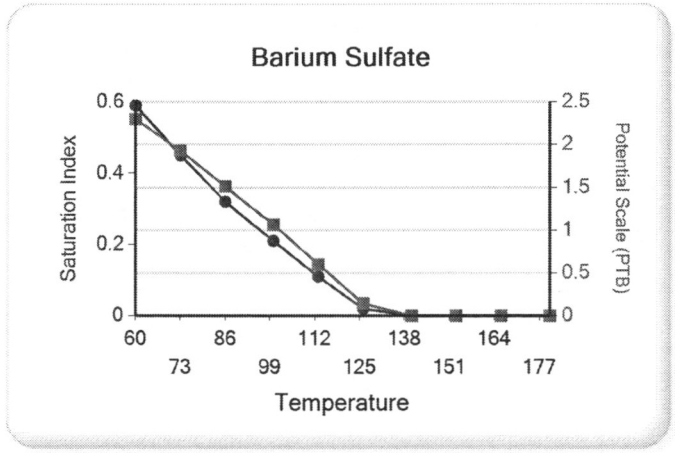
Water Analysis Report

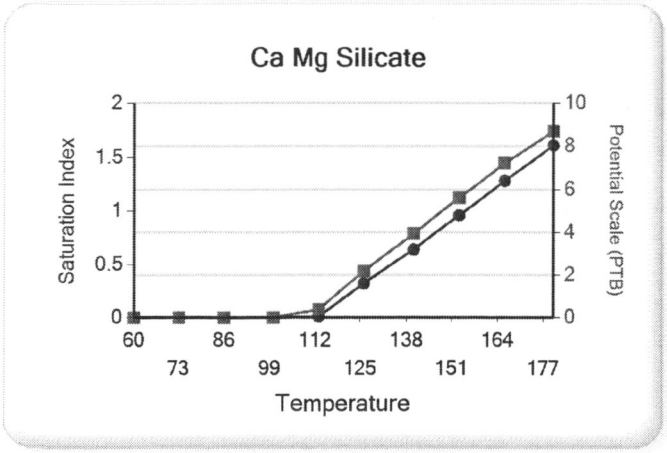
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	1.38
73.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.09	0.00	0.00	0.00	0.00	0.00	0.00	5.82	1.38
86.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.15	0.00	0.00	0.00	0.00	0.00	0.00	6.11	1.38
100.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.19	0.00	0.00	0.26	1.45	0.00	0.00	6.42	1.39
113.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.21	0.00	0.00	0.82	3.96	0.01	0.39	6.76	1.39
126.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.23	0.00	0.00	1.39	6.34	0.32	2.18	7.11	1.40
140.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.24	0.00	0.00	1.97	8.55	0.64	3.93	7.48	1.40
153.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.25	0.00	0.00	2.54	10.56	0.96	5.62	7.86	1.40
166.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.25	0.00	0.00	3.11	12.33	1.28	7.22	8.24	1.40
180.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.25	0.00	0.00	3.68	13.84	1.61	8.71	8.63	1.40

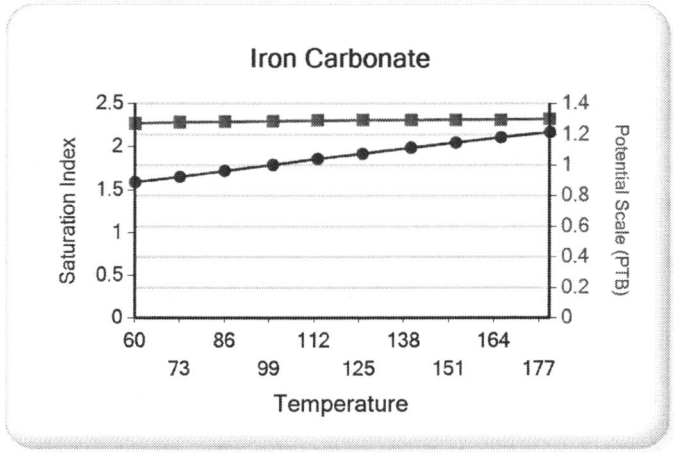
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Fe Silicate

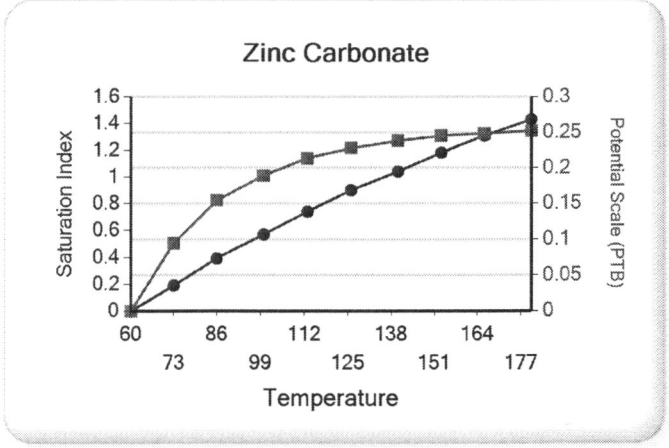
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

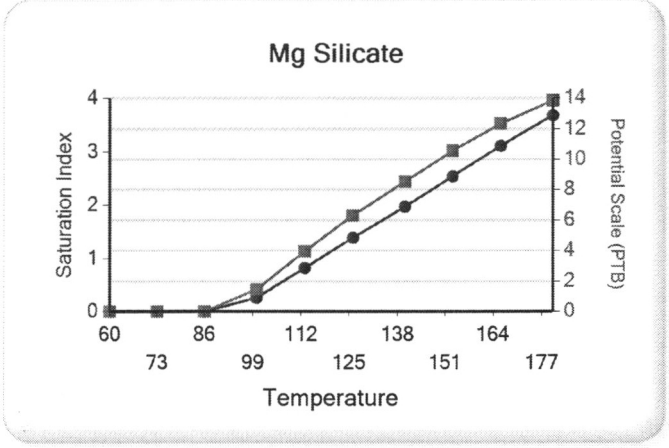


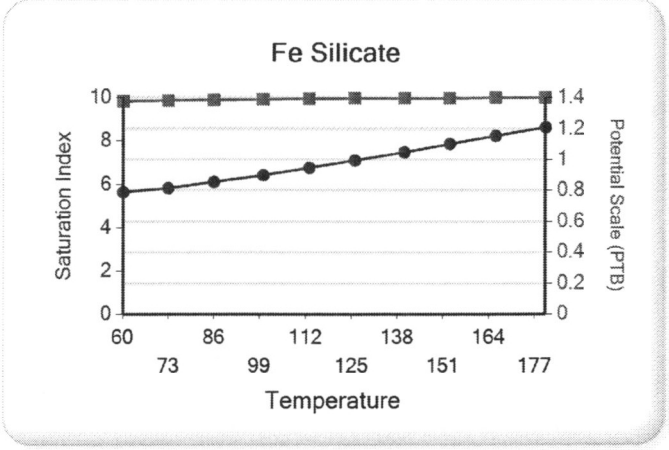







Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.3
0.25
0.2
0.15
0.1
0.05
0
60
86
112
138
164
73
99
125
151
177


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
4
3
2
1
0
14
12
10
8
6
4
2
0
60
86
112
138
164
73
99
125
151
177


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
10
8
6
4
2
0
1.4
1.2
1
0.8
0.6
0.4
0.2
0
60
86
112
138
164
73
99
125
151
177

RECEIVED
JUL 30 2013
ECEJ

July 26, 2013

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

RE: EPA AREA PERMIT NO. UT2736-04421
Mechanical Integrity Test
Standard Five year retesting for Ute Tribal 33-10-D3

Mr. Breffle:
The enclose Mechanical Integrity Test was performed on the above referenced well on July 20, 2013. This MIT was performed because the well was due for the regular five year Mechanical Integrity Test.

If you need any more information please call at (435) 722-5302.

Sincerely,
Petroglyph Operating Co., Inc.

Rodrigo Jurado
Regulatory Compliance Specialist

Encl: MIT for the Ute Tribal 33-10-D3

U2 Entered
Date 9/6/13
Initial DB

GREEN	BLUE	CBI
	2	

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: _____ Date: 7.12.013

Test conducted by: BILL MURRAY

Others present: _____

Well Name: 33-10D3 Type: ER SWD Status: AC TA UC

Field: ANTELOPE CREEK

Location: 33-10D3 Sec: ____ T ____ N/S R ____ E/W County: DUCHESNE State: UT

Operator: PETROGLYPH ENERGY

Last MIT: / / Maximum Allowable Pressure: _____ PSIG

Is this a regularly scheduled test? [X] Yes [ ] No

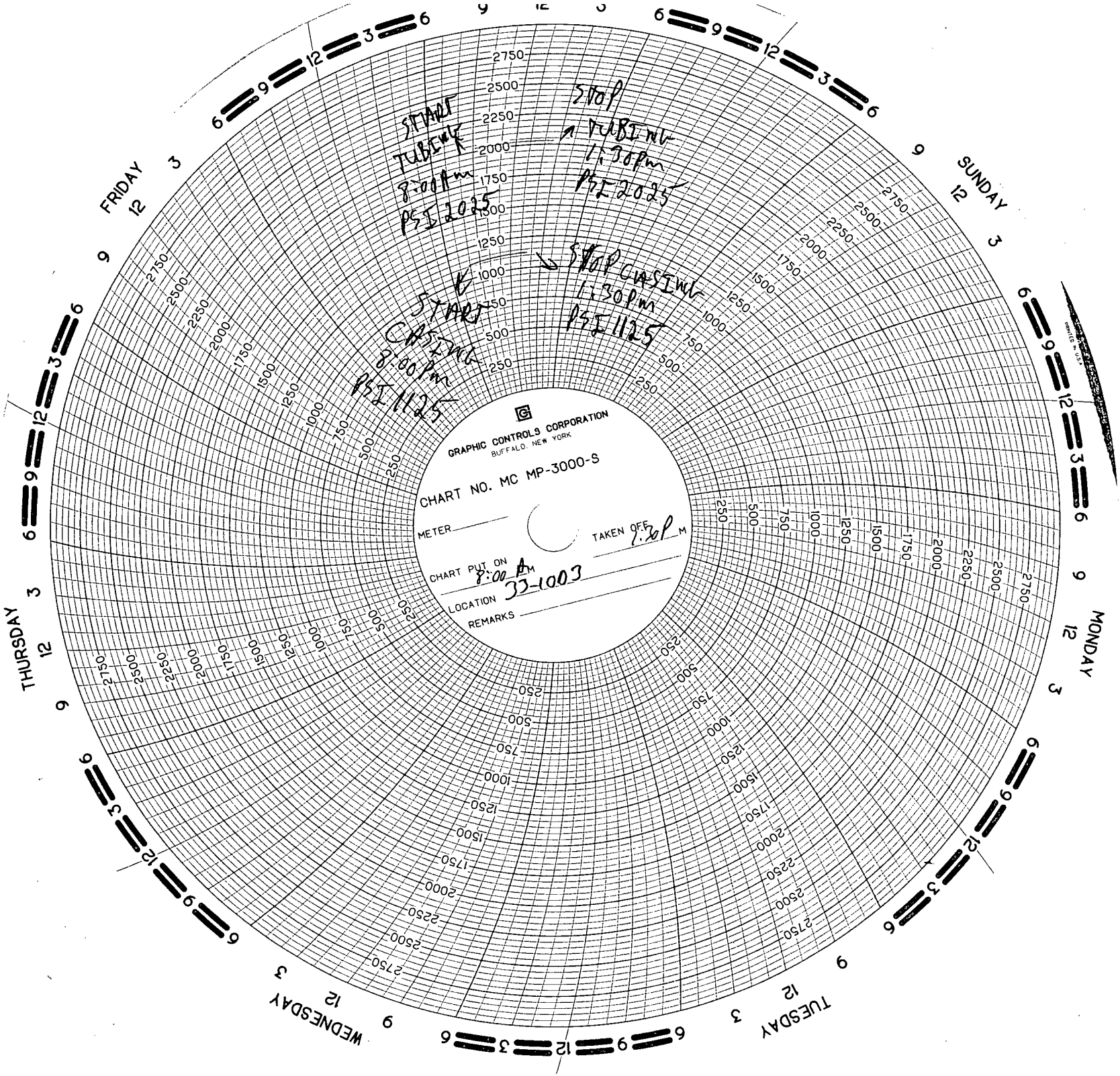
Initial test for permit? [ ] Yes [ ] No

Test after well rework? [ ] Yes [ ] No

Well injecting during test? [X] Yes [ ] No If Yes, rate: 103 bpd

Pre-test casing/tubing annulus pressure: _____ psig

MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING PRESSURE			
Initial Pressure	2025 psig	psig	psig
End of test pressure	2025 psig	psig	psig
CASING / TUBING ANNULUS PRESSURE			
0 minutes	1125 psig	psig	psig
5 minutes	1125 psig	psig	psig
10 minutes	1125 psig	psig	psig
15 minutes	1125 psig	psig	psig
20 minutes	1125 psig	psig	psig
25 minutes	1125 psig	psig	psig
5 1/2 HOURS ~~30 minutes~~	1125 psig	psig	psig
minutes	psig	psig	psig
minutes	psig	psig	psig
RESULT	[ ] Pass [ ] Fail		


GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-3000-S
METER
TAKEN OFF 7:30 P M
CHART PUT ON 8:00 A M
LOCATION 33-1003
REMARKS
START TUBING 8:00 Am PSI 2025
START CASING 8:00 Pm PSI 1125
STOP TUBING 1:30 Pm PSI 2025
STOP CASING 1:30 Pm PSI 1125
SUNDAY
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

AUG 24 1998

Ref:8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

#47

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Ute Tribal #33-10D3 (UT04421)
Antelope Creek Waterflood
Modified EPA Area Permit
UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced modified area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, and the successfully run mechanical integrity test (MIT), with chart, on the Ute Tribal #33-10D3 (UT2736-04421) 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 Modified 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 2248 psig**, as modified May 8, 1998.

Printed on Recycled Paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

AUG 24 1998

Scan under
UT20736-04421
Authorization to
Inject Final

Ref:8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

#47

RE: UNDERGROUND INJECTION CONTROL (UIC)
Authorization to Inject
Ute Tribal #33-10D3 (UT04421)
Antelope Creek Waterflood
Modified EPA Area Permit
UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced modified area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, and the successfully run mechanical integrity test (MIT), with chart, on the Ute Tribal #33-10D3 (UT2736-04421) 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 Modified 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 2248 psig**, as modified May 8, 1998.

Printed on Recycled Paper

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 Partnerships and
Regulatory Assistance

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

Ms. Elaine Willie, Environmental Director
#20 Ute Indian Tribe

Mr. Norman Cambridge
#11 BIA - Uintah & Ouray Agency

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

Mr. Jerry Kenczka
#12 BLM - Vernal District Office

8/26/98 CW 3374C (UTE TRIBAL #33-1D3)(UT0442)

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.

AUG 28 1998

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 380 306 042

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

7. Date of Delivery
AUG 28 1998

5. Received By: *(Print Name)* Charlene Green

6. Signature: *(Addressee or Agent)* X Charlene Green

8. Addressee's Address *(Only if requested and fee is paid)* rec'd 26
SEP 1 1998

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

PS Form 3811, December 1994 102595-97-B-0179 Domestic Return Receipt

---

P 380 306 042
8/26/98 CW 3374C

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 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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

CONCURRENCE COPY

AUG 24 1998

Ref:8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kathy Turner
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 #33-10D3 (UT04421)
Antelope Creek Waterflood
Modified EPA Area Permit
UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Thank you for the recently submitted information pertaining to the above-referenced modified area permit and well. The Well Rework Record, injection zone fluid pore pressure survey, and the successfully run mechanical integrity test (MIT), with chart, on the Ute Tribal #33-10D3 (UT2736-04421) 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 Modified 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 2248 psig**, as modified May 8, 1998.

CEW 8P-W-GW 8/18/98 8P-W-GW 8/21/98 8P-W-GW 8/24/98 LG mailed 8/26/98 LG Hale 8/21/98

Printed on Recycled Paper

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 Partnerships and
Regulatory 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: August 17, 1998, Chuck W., F:\DATA\WP\PETROGLF\AUT-IN30-10D3