Inspection Report For Well: UT20736 - 06483

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

This form was printed on 9/24/2013

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

Others: Ajayi, Christopher — Time: 1:53 am / pm

OPERATOR (only if different): _____

REPRESENTATIVE(S): Chad Stevinsen

PRE-INSPECTION REVIEW

Petroglyph Operating Company, Inc

Well Name:	Ute Tribal 29-05
Well Type:	Enhanced Recovery (2R)
Operating Status:	AC (ACTIVE) as of 7/18/2005
Oil Field:	Antelope Creek (Duchesne)
Location:	SWNW S29 T5S R3W
Indian Country:	X, Uintah and Ouray

Last Inspection:	7/13/2010	***Allowable Inj Pressure:***	1670 /
Last MIT:	Pass 8/3/2010	***Annulus Pressure From Last MIT:***	1035

BLACK = POSSIBLE VIOLATION GREY = DATA MISSING

INSPECTION TYPE: **(Select One)**

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

ICIS Entered
Date 12/3/13
Initials DB

OBSERVED VALUES:

Tubing Gauge:	[x] Yes [ ] No	Pressure: U: 714 / 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)
- [ ] Active
- [x] Not Injecting
- [ ] Plugged and Abandoned
- [ ] Being Reworked
- [ ] Production
- [ ] Under Construction

U2 Entered
Date 12/17/13
Initial

GREEN	BLUE
	1

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

Inspection Report For Well: UT20736 - 06483 (PAGE 2)

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

Comments and site conditions observed during inspection: _____

GPS: GPS File ID: _____

Signature of EPA Inspector(s): _____ _____

☐ Data Entry ☐ Compliance Staff ☐ Hard Copy Filing

NOTICE OF INSPECTION

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

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

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

Firm Name: 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

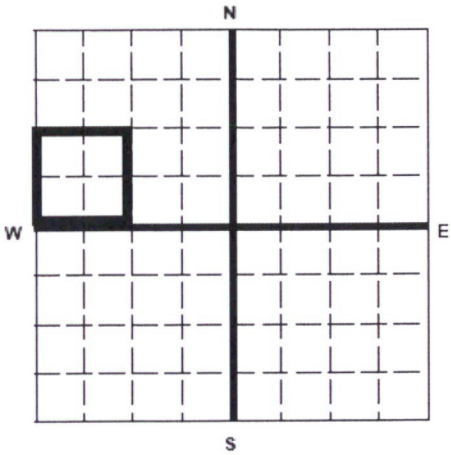
United States Environmental Protection Agency
Washington, DC 20460

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	UT2736-06483

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

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

Surface Location 1980 ft. frm (N/S) N Line of quarter section
and 660 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 29-05

		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	1225	1500	0		0	0
February	16	1411	1561	9		0	0
March	16	1622	1630	61		0	0
April	16	1388	1439	4		0	0
May	16	1445	1585	49		0	0
June	16	1460	1634	37		0	0
July	16	1491	1615	3		0	0
August	16	1443	1624	0		0	0
September	16	1399	1607	1		0	0
October	16	1270	1551	1		0	0
November	16	1380	1596	8		0	0
December	16	1242	1250	2		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

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

GREEN SEC OB TAB 2

Not Entered
Date 4/6/17
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 OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-05 INJ, DUCHESNE**	Lab Tech:	**Kaitlyn Natelli**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2017**		
Sample ID:	**WA-345316**		

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):	1.0011
pH:	8.70
Calculated TDS (mg/L):	5529.57
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
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):	1660.25	Chloride (Cl):	1500.00
Potassium (K):	9.73	Sulfate (SO_4):	8.00
Magnesium (Mg):	16.74	Bicarbonate (HCO_3):	2196.00
Calcium (Ca):	27.55	Carbonate (CO_3):	
Strontium (Sr):	2.12	Hydroxide(HO):	
Barium (Ba):	8.69	Acetic Acid (CH_3COO)	
Iron (Fe):	79.55	Propionic Acid (C_2H_5COO)	
Zinc (Zn):	6.75	Butanoic Acid (C_3H_7COO)	
Lead (Pb):	0.17	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Ammonia NH_3:		Fluoride (F):	
Manganese (Mn):	0.44	Bromine (Br):	
Aluminum (Al):	0.06	Silica (SiO_2):	13.58
Lithium (Li):	2.67	Calcium Carbonate ($CaCO_3$):	
Boron (B):	1.87	Phosphates (PO_4):	6.59
Silicon (Si):	6.35	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	1.80	23.57	0.36	2.01	4.96	4.53	4.39	57.84	0.00	0.00	0.00	0.00	0.00	0.00	11.45	3.53
149.00	267.00	1.86	23.64	0.27	1.57	4.91	4.53	4.48	57.84	0.00	0.00	0.00	0.00	0.00	0.00	11.19	3.53
168.00	483.00	1.94	23.72	0.20	1.19	4.88	4.53	4.58	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.97	3.53
187.00	700.00	2.02	23.79	0.14	0.89	4.88	4.53	4.67	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.77	3.53
206.00	917.00	2.11	23.86	0.11	0.67	4.90	4.53	4.76	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.61	3.53
224.00	1133.00	2.21	23.91	0.08	0.54	4.93	4.53	4.85	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.46	3.53
243.00	1350.00	2.31	23.95	0.07	0.47	4.99	4.53	4.93	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.33	3.53
262.00	1567.00	2.42	23.99	0.07	0.48	5.05	4.53	5.00	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.22	3.53
281.00	1783.00	2.54	24.02	0.08	0.54	5.12	4.53	5.07	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.13	3.53
300.00	2000.00	2.65	24.04	0.10	0.65	5.21	4.53	5.12	57.84	0.00	0.00	0.00	0.00	0.00	0.00	10.04	3.53

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

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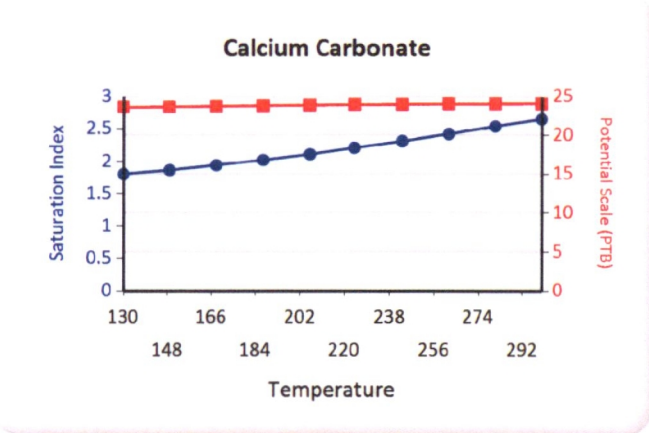
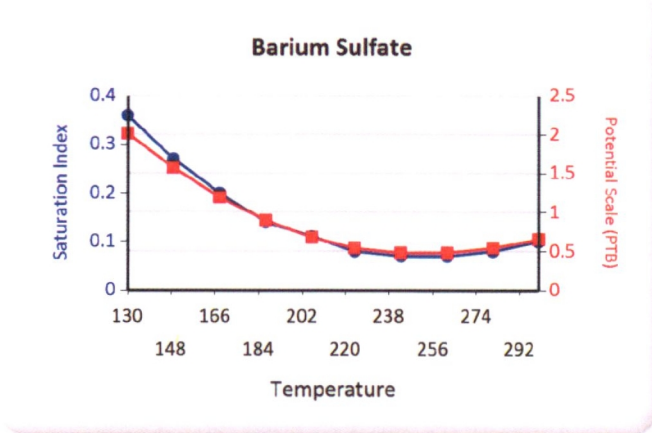
Water Analysis Report

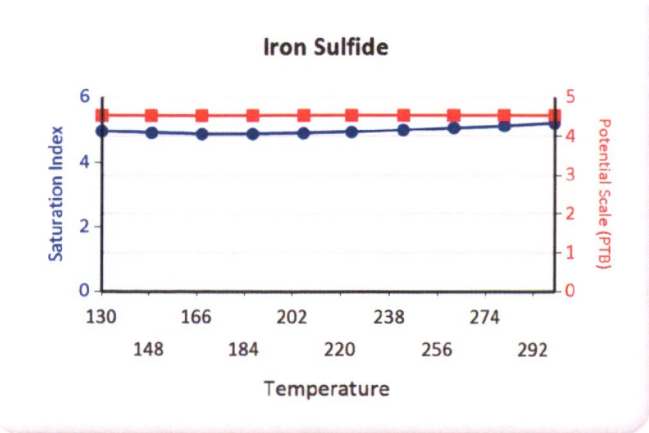
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	4.53	11.56	0.07	5.17	27.91	2.63	15.86	15.20	31.50
149.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	3.18	4.54	11.13	0.07	5.91	29.55	3.03	16.72	15.65	31.50
168.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	3.37	4.54	10.74	0.07	6.66	30.85	3.44	17.34	16.14	31.50
187.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	3.55	4.54	10.40	0.07	7.40	31.79	3.85	17.75	16.65	31.50
206.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	3.71	4.54	10.10	0.07	8.13	32.43	4.26	17.99	17.16	31.50
224.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	3.85	4.54	9.83	0.07	8.84	32.84	4.67	18.14	17.67	31.50
243.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	3.98	4.54	9.60	0.07	9.53	33.10	5.06	18.23	18.17	31.50
262.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09	4.54	9.38	0.07	10.18	33.25	5.44	18.28	18.66	31.50
281.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	4.18	4.54	9.19	0.07	10.81	33.33	5.81	18.31	19.13	31.50
300.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	4.26	4.54	9.02	0.07	11.39	33.38	6.16	18.32	19.58	31.50

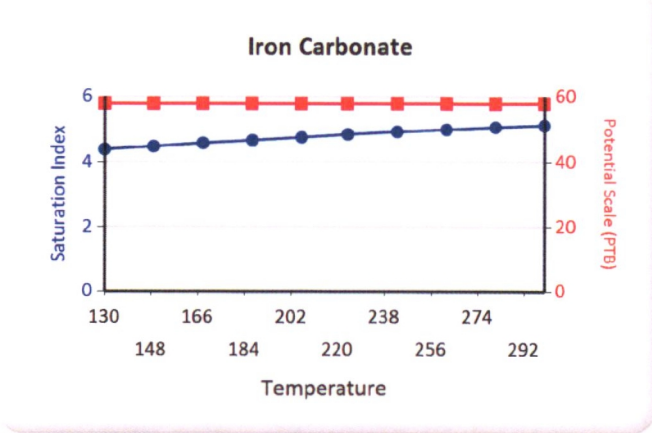
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

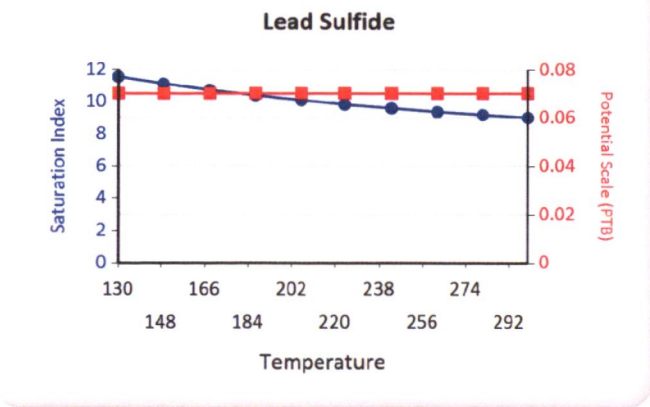
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

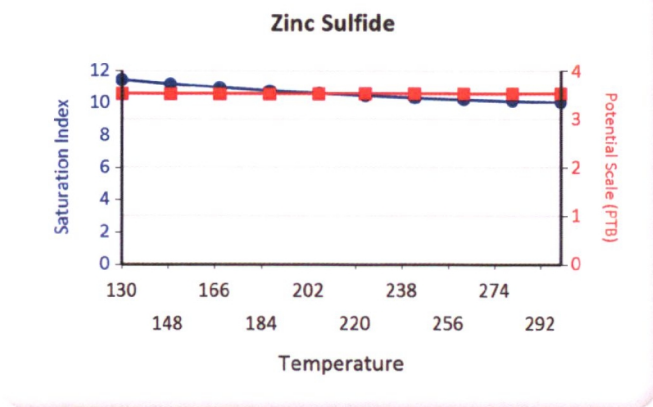


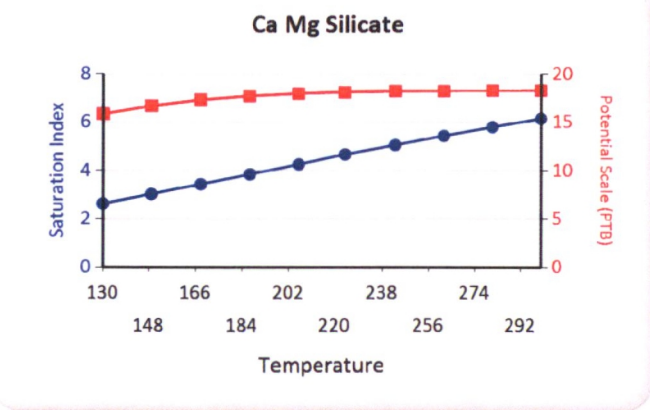







Lead Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
130 166 202 238 274
148 184 220 256 292


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
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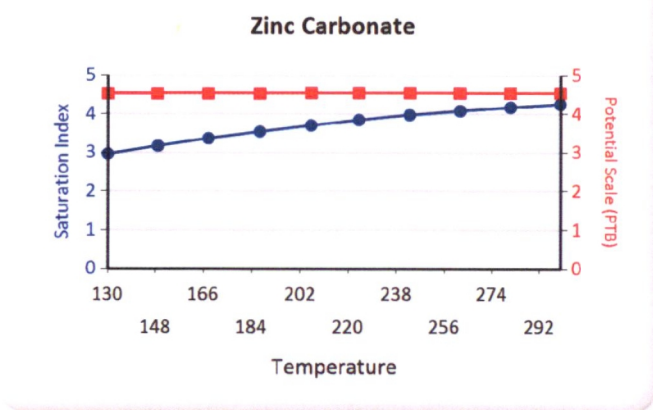
148 184 220 256 292


Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
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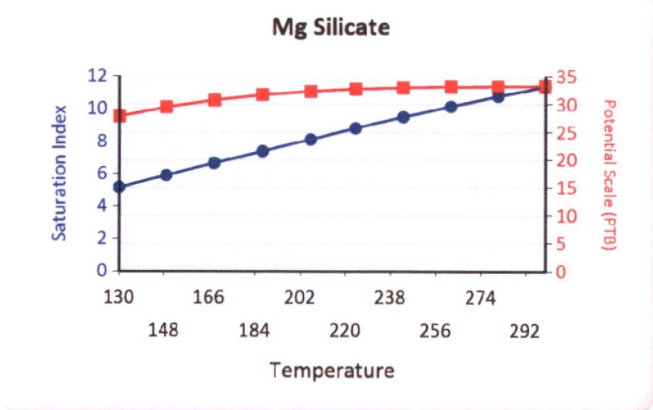
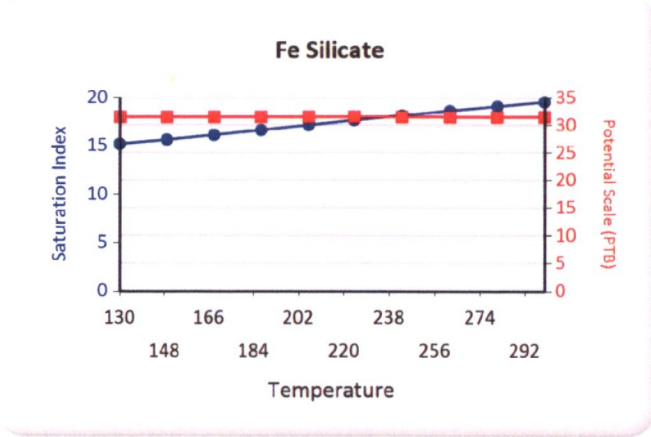
148 184 220 256 292


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
35
30
25
20
15
10
5
0
130
166
202
238
274
148
184
220
256
292

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

EPA

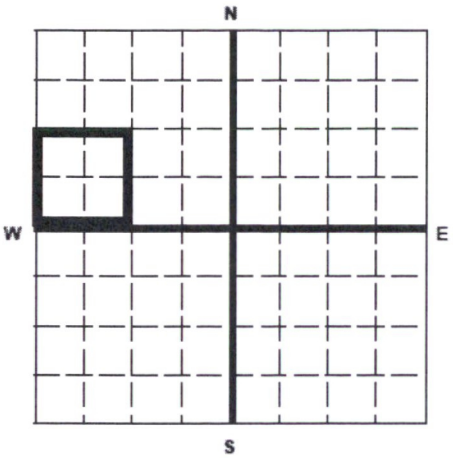
United States Environmental Protection Agency
Washington, DC 20460

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~~ 06483

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

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

Surface Location 1980 ft. frm (N/S) N Line of quarter section
and 660 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 29-05

		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	1416	1540	9		0	0
February	15	1458	1637	15		0	0
March	15	1478	1626	22		0	0
April	15	1423	1558	12		0	0
May	15	1446	1607	31		0	0
June	15	1463	1630	14		0	0
July	15	1396	1625	5		0	0
August	15	1394	1633	16		0	0
September	15	1492	1631	9		0	0
October	15	1464	1607	1		0	0
November	15	1182	1246	0		0	0
December	15	1204	1591	0		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®
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Units of Measurement: **Standard**

Water Analysis Report

Production Company:	**PETROGLYPH OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-05 INJ, DUCHESNE**	Lab Tech:	**Michele Pike**
Sample Point:	**Well Head**		
Sample Date:	**1/6/2016**		
Sample ID:	**WA-327715**		

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):	1.0039
pH:	8.70
Calculated TDS (mg/L):	9536.04
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	15.00
Tot. SuspendedSolids(mg/L):	
Corrosivity(LanglierSat.Indx)	0.00
Alkalinity:	

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	3202.32	Chloride (Cl):	4000.00
Potassium (K):	20.50	Sulfate (SO_4):	60.00
Magnesium (Mg):	37.86	Bicarbonate (HCO_3):	2074.00
Calcium (Ca):	83.04	Carbonate (CO_3):	
Strontium (Sr):	5.42	Acetic Acid (CH_3COO)	
Barium (Ba):	7.60	Propionic Acid (C_2H_5COO)	
Iron (Fe):	17.05	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	3.59	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.68	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.75	Silica (SiO_2):	23.23
Aluminum (Al):	0.03	Calcium Carbonate ($CaCO_3$):	
Lithium (Li):	1.52	Phosphates (PO_4):	14.37
Boron (B):	2.88	Oxygen (O_2):	
Silicon (Si):	10.86		

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	2.33	71.46	0.77	3.69	4.56	9.41	3.80	12.40	0.00	0.00	0.00	0.00	0.00	0.00	10.91	1.88
167.00	267.00	2.25	71.08	0.79	3.74	4.55	9.41	3.71	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.03	1.88
153.00	483.00	2.19	70.75	0.83	3.80	4.55	9.41	3.62	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.18	1.88
140.00	700.00	2.12	70.38	0.87	3.87	4.57	9.41	3.52	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.34	1.88
127.00	917.00	2.06	69.97	0.93	3.95	4.60	9.41	3.43	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.52	1.88
113.00	1133.00	2.01	69.54	1.00	4.03	4.65	9.41	3.34	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.71	1.88
100.00	1350.00	1.96	69.10	1.08	4.12	4.71	9.41	3.25	12.39	0.00	0.00	0.00	0.00	0.00	0.00	11.92	1.88
87.00	1567.00	1.91	68.65	1.18	4.20	4.79	9.41	3.16	12.39	0.00	0.00	0.00	0.00	0.00	0.00	12.15	1.88
73.00	1783.00	1.87	68.20	1.29	4.27	4.88	9.41	3.07	12.39	0.00	0.00	0.00	0.00	0.00	0.00	12.41	1.88
60.00	2000.00	1.84	67.78	1.42	4.34	4.99	9.41	2.98	12.38	0.00	0.00	0.00	0.00	0.00	0.00	12.68	1.88

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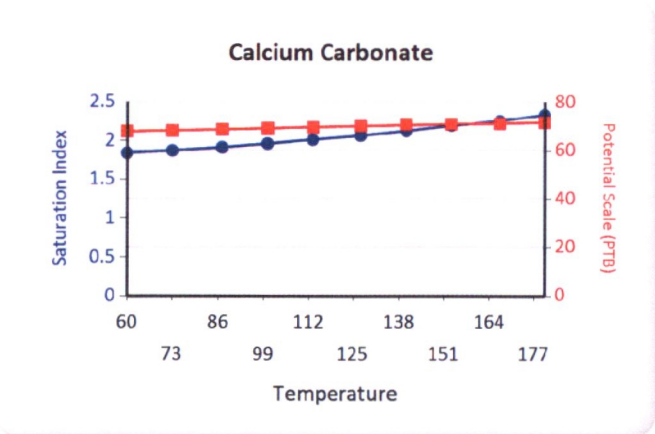
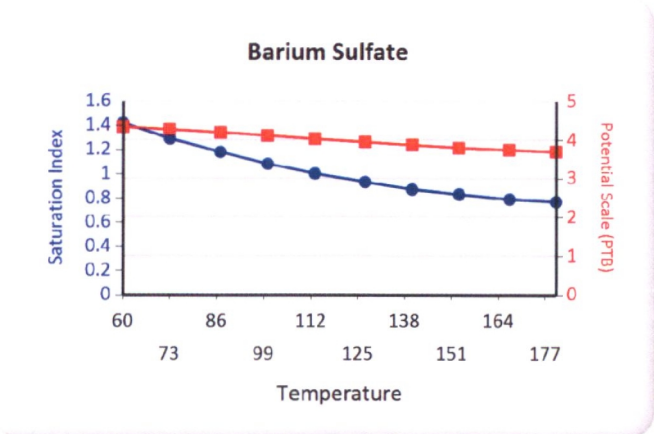
Water Analysis Report

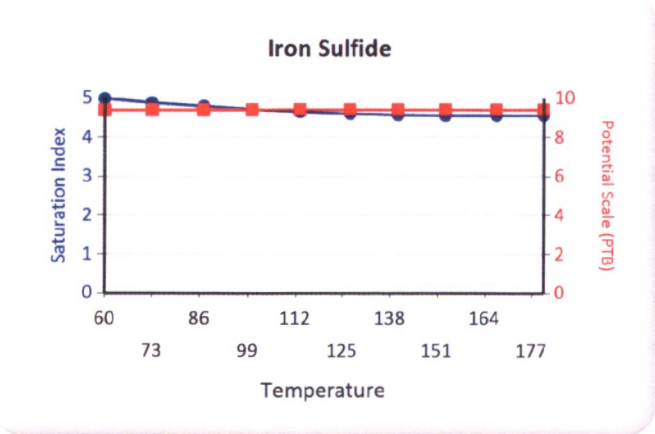
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02	2.41	11.46	0.28	8.44	58.40	4.87	30.77	14.59	13.26
167.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	2.88	2.41	11.70	0.28	7.84	56.34	4.52	30.36	14.16	13.26
153.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	2.73	2.41	11.95	0.28	7.27	54.11	4.20	29.83	13.77	13.26
140.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	12.23	0.28	6.69	51.43	3.87	29.11	13.38	13.26
127.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41	2.40	12.54	0.28	6.11	48.41	3.55	28.16	12.99	13.26
113.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	2.40	12.87	0.28	5.52	45.16	3.22	26.95	12.61	13.26
100.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	2.39	13.23	0.28	4.93	41.71	2.90	25.49	12.24	13.26
87.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	2.38	13.62	0.28	4.33	38.06	2.58	23.78	11.87	13.26
73.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	2.36	14.04	0.28	3.73	34.16	2.25	21.83	11.51	13.26
60.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	2.32	14.50	0.28	3.12	29.93	1.93	19.62	11.15	13.26

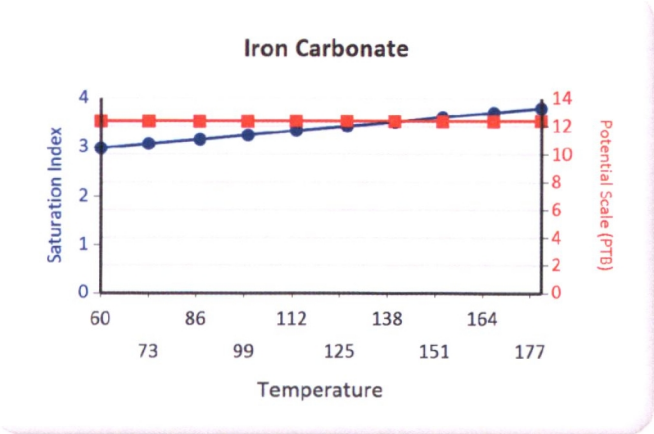
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

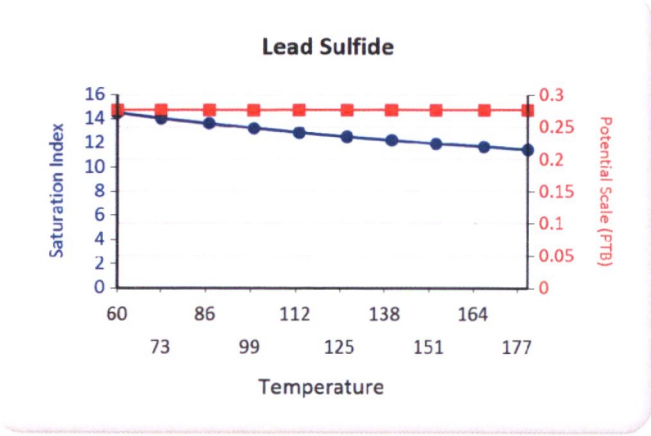
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

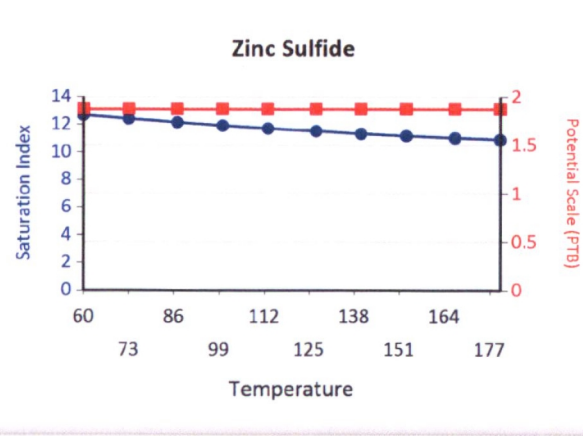


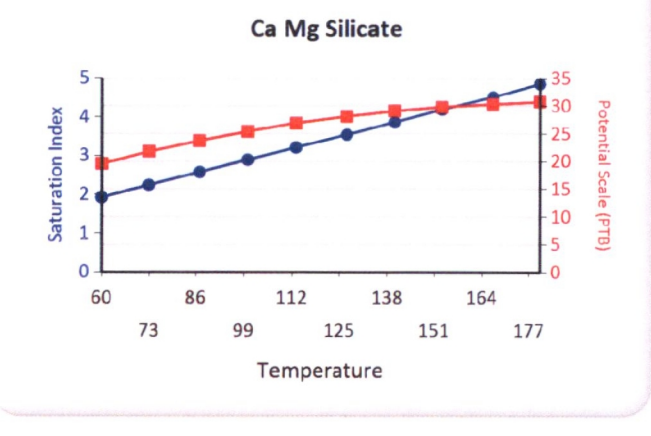







Lead Sulfide
Saturation Index
Potential Scale (PTB)
Temperature
60 86 112 138 164
73 99 125 151 177


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


Ca Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
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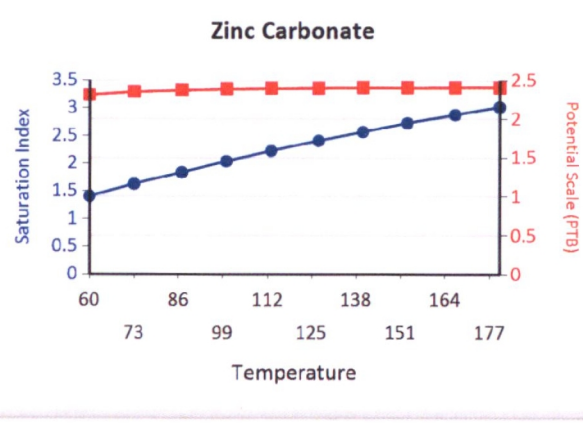
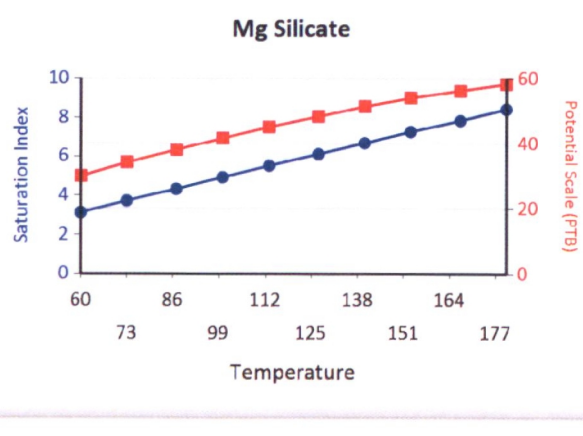
73 99 125 151 177


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


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
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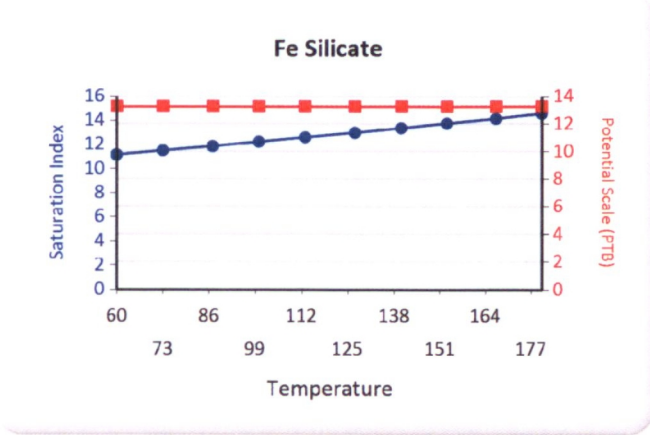
73 99 125 151 177


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
16
14
12
10
8
6
4
2
0
60
86
112
138
164
73
99
125
151
177

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

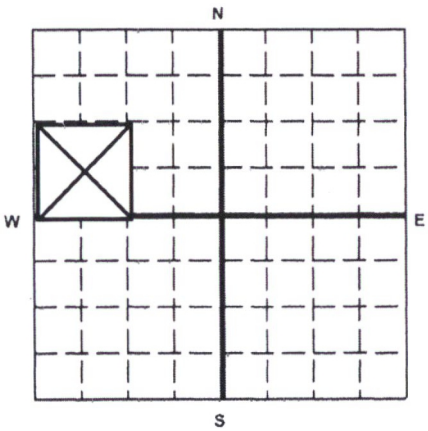
EPA

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	UT2736-06483

Surface Location Description

____ 1/4 of ____ 1/4 of SW 1/4 of NW 1/4 of Section 29 Township 5S Range 3W

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

Surface Location 1980 ft. frm (N/S) N Line of quarter section and 660 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 29-05

		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	687	694	0		0	0
February	14	697	705	0		0	0
March	14	687	687	0		0	0
April	14	667	679	0		0	0
May	14	642	650	0		0	0
June	14	1114	1362	37		0	0
July	14	1358	1476	20		0	0
August	14	1418	1458	~~55~~	53 inj mnthly	0	0
September	14	1207	1343	20		0	0
October	14	1444	1426	111		0	0
November	14	1481	1543	58		0	0
December	14	1541	1618	68		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

	2		TAB
CBI	BLUE	GREEN	

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Units of Measurement: **Standard**

Water Analysis Report

Production Company:	**PETROGLYPH OPERATING CO INC - EBUS**	Sales Rep:	**James Patry**
Well Name:	**UTE TRIBAL 29-05 INJ, DUCHESNE**	Lab Tech:	**Gary Winegar**
Sample Point:	**WELLHEAD**		
Sample Date:	**1/7/2015**		
Sample ID:	**WA-297530**		

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):	1.0041
pH:	8.50
Calculated TDS (mg/L):	10312.75
CO2 in Gas (%):	
Dissolved CO_2 (mg/L)):	0.00
H_2S in Gas (%):	
H2S in Water (mg/L):	35.00

Analysis @ Properties in Sample Specifics			
Cations	*mg/L*	*Anions*	*mg/L*
Sodium (Na):	2876.77	Chloride (Cl):	4000.00
Potassium (K):	43.65	Sulfate (SO_4):	116.00
Magnesium (Mg):	21.49	Bicarbonate (HCO_3):	3172.00
Calcium (Ca):	38.97	Carbonate (CO_3):	
Strontium (Sr):	5.23	Acetic Acid (CH_3COO)	
Barium (Ba):	10.40	Propionic Acid (C_2H_5COO)	
Iron (Fe):	0.45	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.06	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.00	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.16	Silica (SiO_2):	27.57

Notes:
B=6.24 Al=.07 Li=1.39

(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	1.78	33.22	1.75	6.08	3.65	0.25	1.81	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.76	0.03
88.00	157.00	1.78	33.20	1.66	6.05	3.57	0.25	1.85	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.58	0.03
97.00	300.00	1.80	33.23	1.58	6.02	3.50	0.25	1.89	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.41	0.03
106.00	443.00	1.81	33.27	1.51	5.99	3.45	0.25	1.93	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.25	0.03
115.00	585.00	1.83	33.31	1.45	5.96	3.40	0.25	1.98	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.11	0.03
124.00	728.00	1.85	33.35	1.39	5.93	3.36	0.25	2.02	0.32	0.00	0.00	0.00	0.00	0.00	0.00	9.97	0.03
133.00	871.00	1.87	33.39	1.34	5.89	3.33	0.25	2.06	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.84	0.03
142.00	1014.00	1.89	33.43	1.29	5.86	3.31	0.25	2.10	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.72	0.03
151.00	1157.00	1.92	33.47	1.24	5.82	3.29	0.25	2.14	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.61	0.03
160.00	1300.00	1.94	33.51	1.21	5.79	3.28	0.25	2.18	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.51	0.03

		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	0.08	0.01	0.00	0.00	2.10	17.56	0.98	8.67	6.16	0.35
88.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	2.40	19.17	1.12	9.51	6.29	0.35
97.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.02	0.00	0.00	2.76	21.29	1.31	10.63	6.49	0.35
106.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	3.13	23.27	1.51	11.68	6.70	0.35
115.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.03	0.00	0.00	3.50	25.08	1.70	12.63	6.91	0.35
124.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.03	0.00	0.00	3.88	26.72	1.91	13.47	7.14	0.35
133.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.03	0.00	0.00	4.26	28.16	2.11	14.21	7.38	0.35
142.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.04	0.00	0.00	4.64	29.41	2.32	14.84	7.62	0.35
151.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.04	0.00	0.00	5.02	30.45	2.53	15.38	7.86	0.35
160.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.04	0.00	0.00	5.40	31.30	2.74	15.81	8.12	0.35

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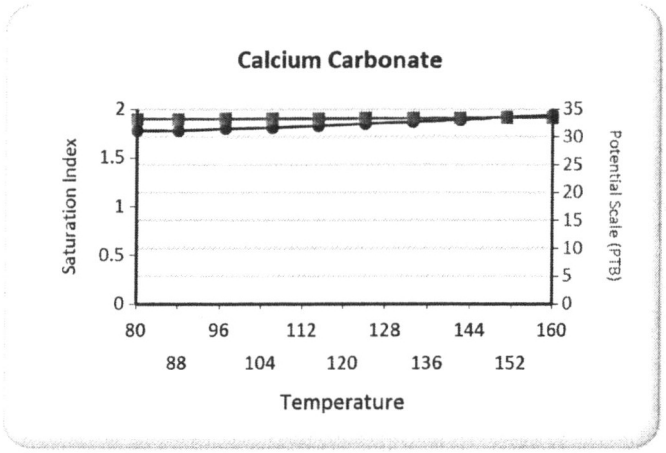
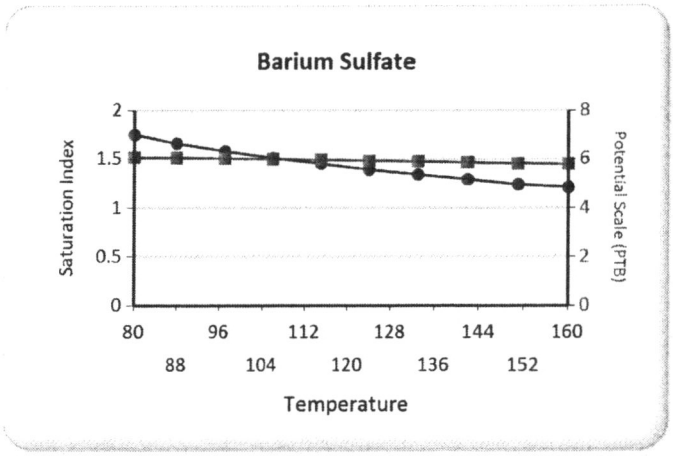
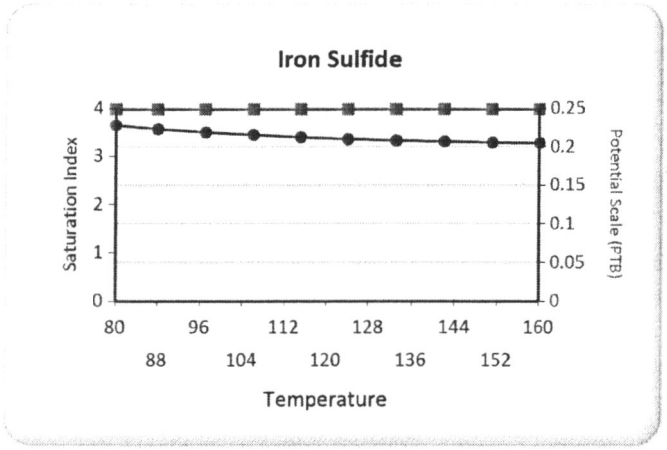
Water Analysis Report

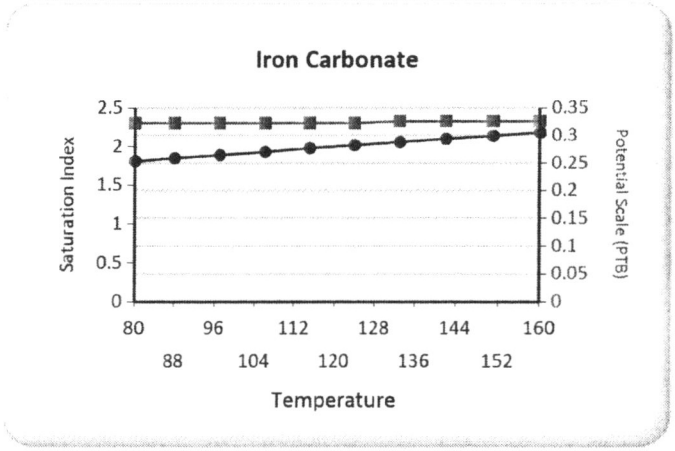
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

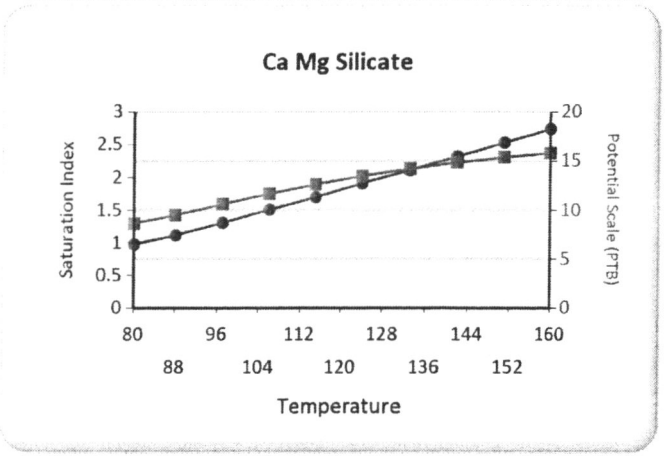
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

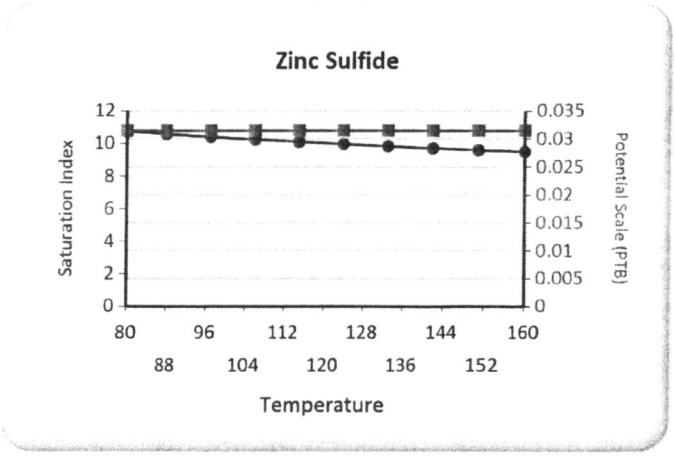


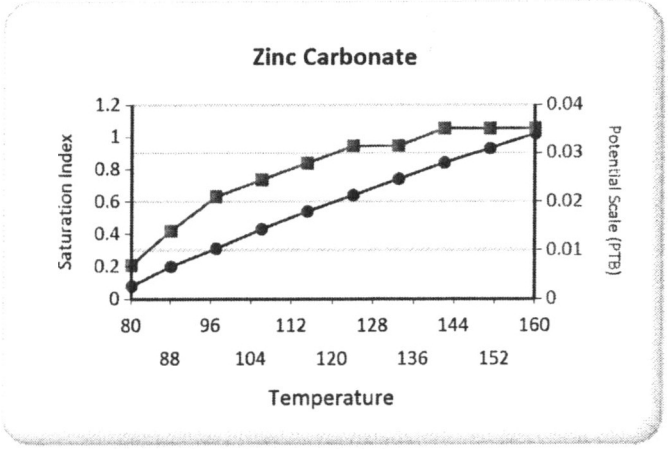


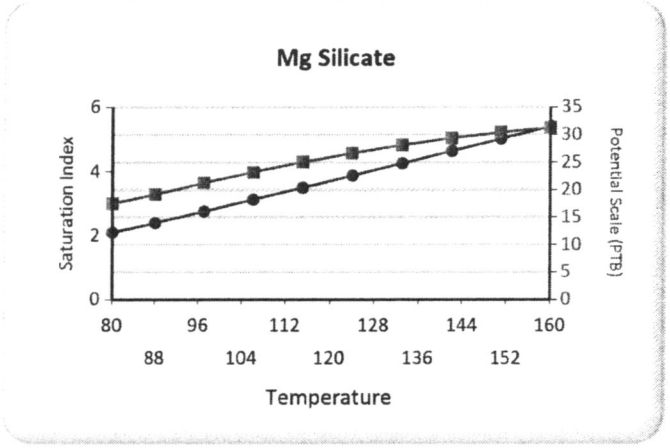


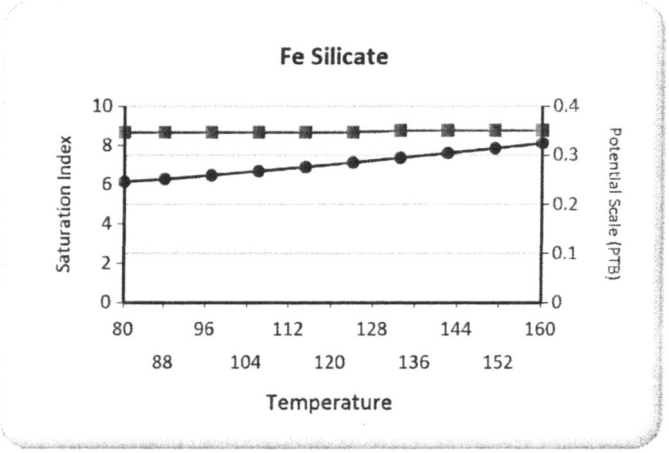







Zinc Carbonate
Saturation Index
Potential Scale (PTB)
Temperature
1.2
1
0.8
0.6
0.4
0.2
0
0.04
0.03
0.02
0.01
0
80
96
112
128
144
160
88
104
120
136
152


Mg Silicate
Saturation Index
Potential Scale (PTB)
Temperature
6
4
2
0
35
30
25
20
15
10
5
0
80
96
112
128
144
160
88
104
120
136
152


Fe Silicate
Saturation Index
Potential Scale (PTB)
Temperature
10
8
6
4
2
0
0.4
0.3
0.2
0.1
0
80
96
112
128
144
160
88
104
120
136
152

August 4, 2015

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

RE: EPA AREA PERMIT NO. UT2736-06483
Mechanical Integrity Test
Standard Five year retesting for Ute Tribal 29-05

Mr. Breffle:
The enclose Mechanical Integrity Test was performed on the above referenced well on July 25, 2015. 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 29-05

CBI

2

U2 Entered
Date 8/12/15
Initial B

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: 7/25/15
Test conducted by: CHAD STEVENSON
Others present: _____

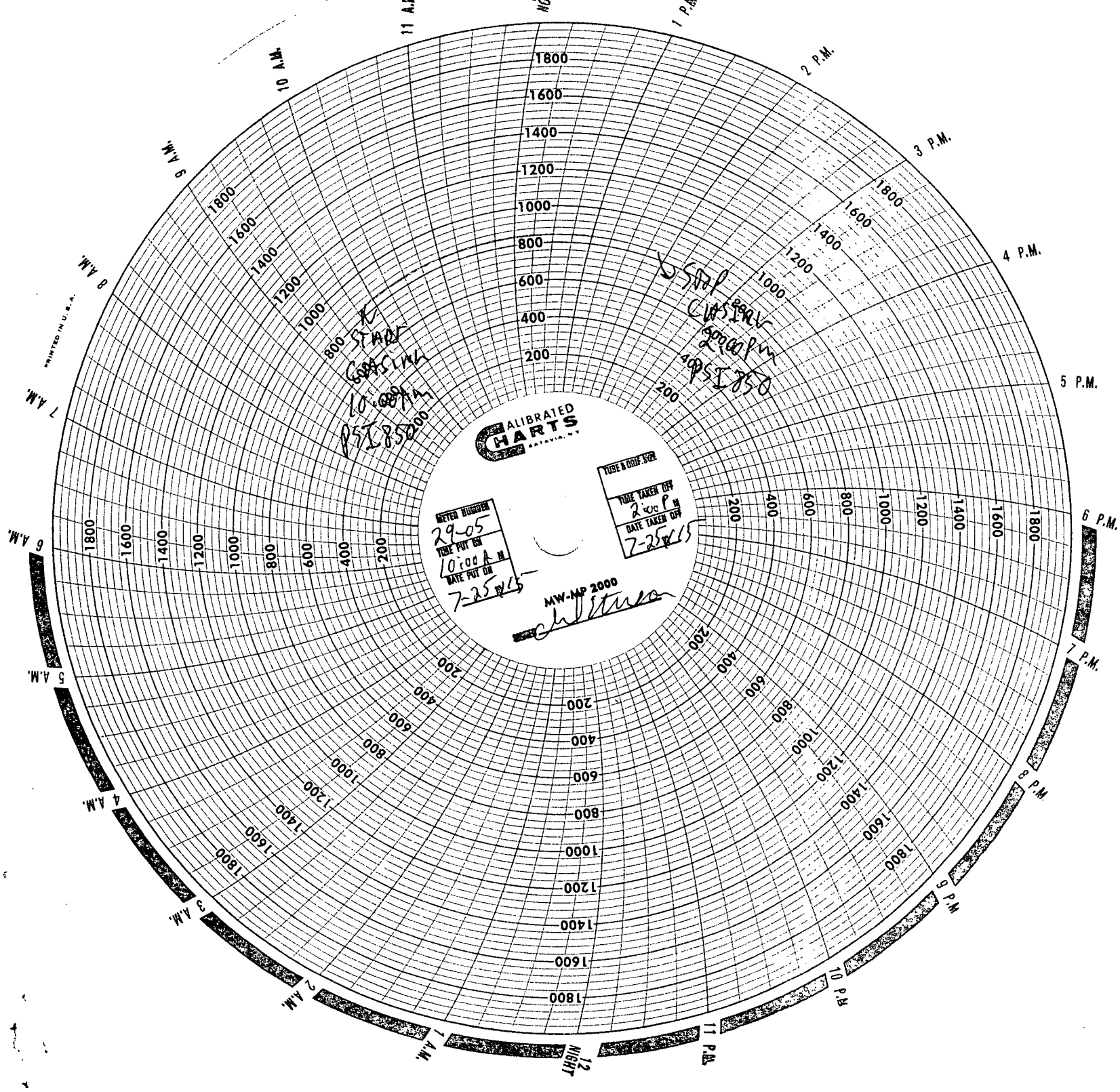
Well Name: 29-05 Type: ER SWD **Status: AC TA UC**
Field: ANTELOPE CREEK
Location: 29-05 Sec: ____ T ____ N / S R ____ E / W County: DUCHESNE State: UT
Operator: PETROGLYPH ENERGY
Last MIT: ___/___/___ **Maximum Allowable Pressure:** _____ **PSIG**

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

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

MIT DATA TABLE	*Test #1*	*Test #2*	*Test #3*
TUBING		***PRESSURE RECORD***	
Initial Pressure	1211 psig	psig	psig
End of test pressure	1211 psig	psig	psig
CASING / TUBING ANNULUS		***PRESSURE RECORD***	
0 minutes	850 psig	psig	psig
5 minutes	850 psig	psig	psig
10 minutes	850 psig	psig	psig
15 minutes	850 psig	psig	psig
20 minutes	850 psig	psig	psig
25 minutes	850 psig	psig	psig
30 minutes	850 psig	psig	psig
2 1/2 Hours *minutes*	850 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 BATAVIA, N.Y.
MW-MP 2000
METER NUMBER
29-05
TIME PUT ON
10:00 A.M.
DATE PUT ON
7-25-15
TIME TAKEN OFF
2:00 P.M.
DATE TAKEN OFF
7-25-15
PRINTED IN U.S.A.
12 NIGHT
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
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.
K START CASING 10:00 AM PSI 850
W START CASING 2:00 PM PSI 850

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

EPA

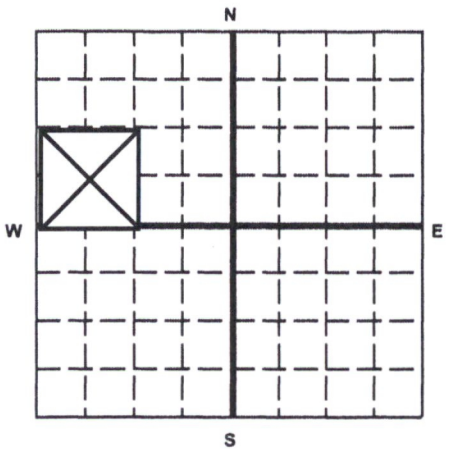
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
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	UT2736-06483

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

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

Surface Location 1980 ft. frm (N/S) N Line of quarter section
and 660 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 29-05

MONTH	YEAR	INJECTION PRESSURE AVERAGE PSIG	INJECTION PRESSURE MAXIMUM PSIG	TOTAL VOLUME INJECTED BBL	TOTAL VOLUME INJECTED MCF	TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MINIMUM PSIG	TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING) MAXIMUM PSIG
January	13	1384	1652	32		0	0
February	13	1307	1627	12		0	0
March	13	1069	1101	0		0	0
April	13	1005	1011	0		0	0
May	13	939	1003	0		0	0
June	13	894	898	0		0	0
July	13	862	876	0		0	0
August	13	826	831	0		0	0
September	13	796	801	0		0	0
October	13	765	776	0		0	0
November	13	735	739	0		0	0
December	13	712	720	0		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)

TAB GREEN BLUE OB 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 29-05 INJ**
Sample Point: **Injection Well**
Sample Date: **1/8/2013**
Sample ID: **WA-231816**

Sales Rep: **James Patry**
Lab Tech: **Layne Wilkerson**

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

Sample Specifics	
Test Date:	1/23/2013
System Temperature 1 (°F):	60
System Pressure 1 (psig):	1300
System Temperature 2 (°F):	180
System Pressure 2 (psig):	15
Calculated Density (g/ml):	1.002
pH:	8.60
Calculated TDS (mg/L):	6981.55
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):	2332.91	Chloride (Cl):	3000.00
Potassium (K):	11.00	Sulfate (SO_4):	270.00
Magnesium (Mg):	45.00	Bicarbonate (HCO_3):	1220.00
Calcium (Ca):	80.00	Carbonate (CO_3):	
Strontium (Sr):		Acetic Acid (CH_3COO)	
Barium (Ba):	1.30	Propionic Acid (C_2H_5COO)	
Iron (Fe):	21.00	Butanoic Acid (C_3H_7COO)	
Zinc (Zn):	0.01	Isobutyric Acid ($(CH_3)_2CHCOO$)	
Lead (Pb):	0.03	Fluoride (F):	
Ammonia NH_3:		Bromine (Br):	
Manganese (Mn):	0.30	Silica (SiO_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
180.00	14.00	2.17	66.45	0.79	0.65	0.00	0.00	3.64	15.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166.00	157.00	2.07	63.40	0.82	0.66	0.00	0.00	3.53	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	300.00	2.00	61.98	0.85	0.67	0.00	0.00	3.44	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	443.00	1.93	60.44	0.90	0.68	0.00	0.00	3.35	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126.00	585.00	1.87	58.80	0.96	0.69	0.00	0.00	3.26	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	728.00	1.81	57.10	1.03	0.70	0.00	0.00	3.17	15.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	871.00	1.76	55.41	1.11	0.72	0.00	0.00	3.08	15.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86.00	1014.00	1.72	53.76	1.21	0.73	0.00	0.00	2.99	15.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1157.00	1.68	52.21	1.32	0.74	0.00	0.00	2.90	15.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	1300.00	1.64	50.79	1.45	0.75	0.00	0.00	2.81	15.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		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	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	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
140.00	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
126.00	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
113.00	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
100.00	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
86.00	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
73.00	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
60.00	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

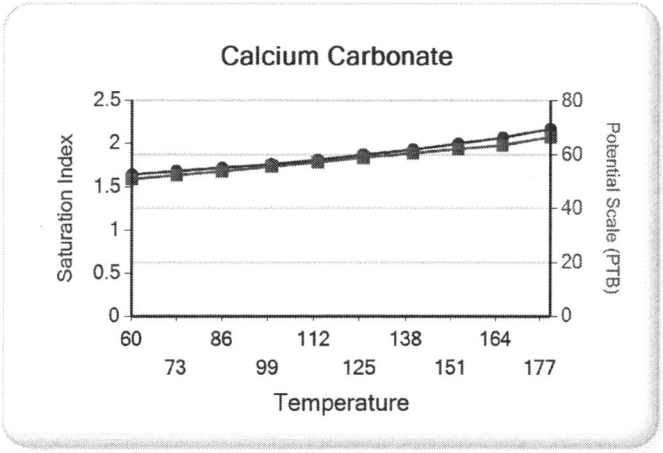
Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

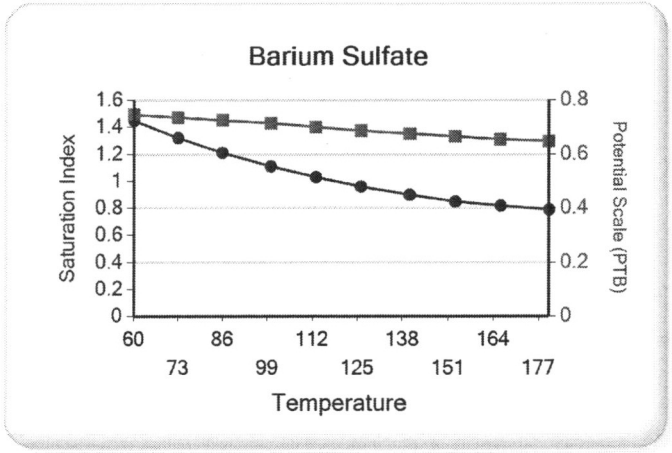
multi-chem®
A HALLIBURTON SERVICE

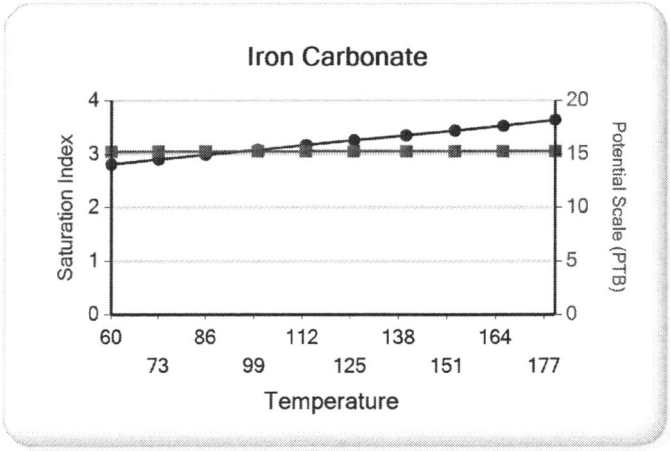
Water Analysis Report

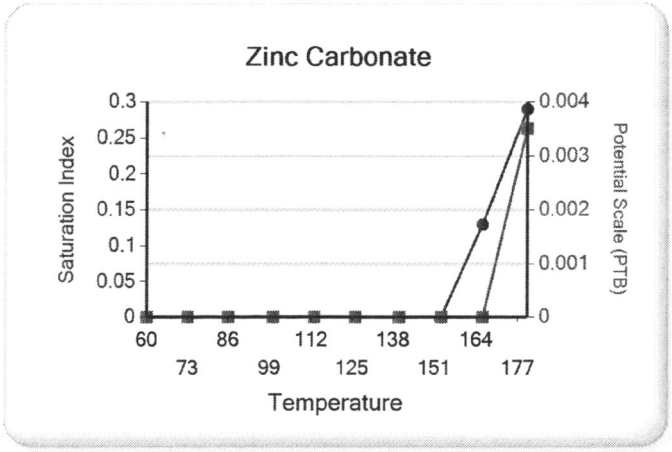
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate

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









UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

JUL 18 2005

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steve Wall, District Manager
Petroglyph Energy, Inc.
4116 West 3000 So. Ioka Lane
Roosevelt, UT 84066

RE: Authorization to Inject
Ute Tribal 29-05
UIC Permit UT20736-**06478**
Antelope Creek Field, Duchesne County, Utah

Dear Mr. Wall:

Thank you for submitting information pertaining to the newly constructed/converted Ute Tribal 29-05 enhanced recovery injection well to the Region 8 Ground Water Program office of the Environmental Protection Agency (EPA). The "Prior To Commencing Injection" requirements for the Ute Tribal 29-05 injection well required well owner and operator Petroglyph Energy, Inc. to submit the following information to the Director:

1. A successful mechanical integrity test (MIT) demonstrating Part I Internal MI,
2. Pore pressure calculation of the proposed injection zone, and
3. completed EPA Form No. 7520-12.

All required information has been submitted, and has been reviewed and approved by the EPA. Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal 29-05 enhanced recovery injection well under the conditions of the Authorization for Additional Well and UIC Area Permit UT20736-00000 as modified.

As of this approval, responsibility for permit compliance and enforcement is transferred to the Region 8 UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well and UIC Permit number on all correspondence regarding this well.

Printed on Recycled Paper

Technical Enforcement Program - UIC
U.S. EPA Region 8, Mail Code 8ENF-UFO
999 18th Street, Suite 300
Denver, Colorado 80202-2466

The Director has determined that the maximum allowable surface injection pressure (MAIP) for the Ute Tribal 29-05 is **1670** psig. Please be reminded that it is the responsibility of the owner/operator to be aware of, and to comply with, all conditions of Authorization for Additional Well UT20736-06478 and EPA UIC Area Permit UT20736-00000 and relevant modifications as issued.

If you have any questions regarding this Authorization, please call Dan Jackson of my staff at (303) 312-6155. For questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917.

Sincerely,

Tracy M. Eagle

Tracy M. Eagle
Director
Ground Water Program

cc: Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

Maxine Natchees, Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe
P.O. Box 190
Fort Duchesne, UT 84026

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

Gil Hunt
Technical Services Manager
Utah Division of Oil, Gas, and Mining
1594 West North Temple - Suite 1220
Salt Lake City, UT 84114-5801

Kirk Fleetwood, PE
BLM - Vernal District
170 South 500 East
Vernal, UT 84078

Chester Mills
BIA - Uintah & Ouray Indian Agency
P.O. Box 130
Fort Duchesne, UT 84026

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

UT 20736-06478

Steve Wall, District Manager
Petroglyph Energy, Inc.
4116 West 3000 So. Ioka Lane
Roosevelt, UT 84066

RWWurth JUL 18 2005

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Callie Duncan ☐ Agent ☑ Addressee

B. Received by (Printed Name) Callie Duncan
C. Date of Delivery

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

RECEIVED
JUL 25 2005
EPA Region 8
Ground Water Program

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7001 0320 0005 9389 4320

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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

OFFICIAL USE

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

Postmark Here
JUL 18 2005

Sent To
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

Steve Wall, District Manager
Petroglyph Energy, Inc.
4116 West 3000 So. Ioka Lane
Roosevelt, UT 84066

7001 0320 0005 9389 4320

PS Form 3800, January 2001 See Reverse for Instructions

UIC Program Action : final Auth to Inject

UIC Number: UT20736-06478 Well Name: Ute Tribal 29-05

Operator: Petroglyph

To:	Requested Action:	Mailcode	Initials	Date
Originator: Dan	phone: 6155	8P-W-GW	DOF	7/14/05
UIC Review	❑ DWJ ❑ CT	8P-W-GW		
K Bartholow, Admin	proof	8P-W-GW	KB	7/15
T Eagle, Dir, GWP	❑ concur ❑ signature	8P-W-GW	JW	7/15/05
L Johnson, Admin	proof	~~8P-W~~		
D Thomas, Dir, WP	❑ concur ❑ signature	8P-W		
M Brennan, Admin	proof	8-P		
S Tuber, ARA, OPRA	❑ signature	8-P		
K Bartholow, Admin	date stamp & mail original letter & copy of docs to Addressee	8P-W-GW		
Originator	make CC: copies	8P-W-GW		
~~J Taylor~~	~~send Public Notice~~	~~8P-W-GW~~		
K Bartholow, Admin	mail copies to CC's	8P-W-GW	KB	7/19/05
Originator	File documents	8P-W-GW		

LEFT SIDE

- Concurrence Copy
- Request Letter & relevant information
- _____
- _____

RIGHT SIDE

- Response Letter
- _____
- _____

COMMENTS: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

JUL 18 2005

Ref: 8P-W-GW

CONCURRENCE COPY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steve Wall, District Manager
Petroglyph Energy, Inc.
4116 West 3000 So. Ioka Lane
Roosevelt, UT 84066

RE: Authorization to Inject
Ute Tribal 29-05
UIC Permit UT20736-**06478**
Antelope Creek Field, Duchesne County, Utah

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8P-W-GW 7/14/05

Tracy Ewalt 8P-W-GW 7/15/05

Printed on Recycled Paper

Technical Enforcement Program - UIC
U.S. EPA Region 8, Mail Code 8ENF-UFO
999 18th Street, Suite 300
Denver, Colorado 80202-2466

The Director has determined that the maximum allowable surface injection pressure (MAIP) for the Ute Tribal 29-05 is **1670** psig. Please be reminded that it is the responsibility of the owner/operator to be aware of, and to comply with, all conditions of Authorization for Additional Well UT20736-06478 and EPA UIC Area Permit UT20736-00000 and relevant modifications as issued.

If you have any questions regarding this Authorization, please call Dan Jackson of my staff at (303) 312-6155. For questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917.

Sincerely,

Tracy M. Eagle
Director
Ground Water Program

cc: Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

Maxine Natchees, Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe
P.O. Box 190
Fort Duchesne, UT 84026

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

Gil Hunt
Technical Services Manager
Utah Division of Oil, Gas, and Mining
1594 West North Temple - Suite 1220
Salt Lake City, UT 84114-5801

Kirk Fleetwood, PE
BLM - Vernal District
170 South 500 East
Vernal, UT 84078

Chester Mills
BIA - Uintah & Ouray Indian Agency
P.O. Box 130
Fort Duchesne, UT 84026

bcc: Nathan Wiser, 8ENF-UFO