DATE IN 11/9/08	SUSPENSE OK	ENGINEER WVJ	LOGGED IN	TYPE SWD 1109	APP NO. PKVR0734128684

12/6/07

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

30-007-20892

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify ______________________

Rule 40 = OK

Colfax Co. El Paso E&P Comp. LP

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☒ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☒ Waivers are Attached

Well File Reviewed — New DRILL

OGRID 180514 El Paso

Turn in all logs

(approved 5/19/77)

1353E

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

David Veltri	[signature]	**Production Manager**	11/14/07
Print or Type Name	Signature	Title	Date

david.veltri@elpaso.com
e-mail Address

COPY

elpaso

EL PASO E & P COMPANY, L.P.
P.O. Box 190 - RATON, N.M. 87740

November 14, 2007

New Mexico Oil Conservation Division
1220 South St. Frances
Santa Fe, NM 87505

Attention: William Jones

Re: VPR A 500
Salt Water Disposal Application for Authority to Inject

Dear NMOCD:

Find attached Application for Authority to Inject VPR A 500 with the following enclosures:

1. Application Checklist
2. Application for Authority to Inject
3. Approved APD
3. Procedure
4. Vicinity Map
5. Geo Prog
6. Source Water Analyses
7. Letter to Surface Owner
8. Receipt of Letter to Surface Owner
9. Legal Notice Publication

Respectfully,

David Veltri
Production Manager
El Paso Energy Raton

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance X_____Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: **EL PASO E & P COMPANY, L.P.**

ADDRESS: **PO BOX 190 RATON, NEW MEXICO 87740**

CONTACT PARTY: **DAVID VELTRI** PHONE: **(505) 445-6721**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes ____X____No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **DAVID VELTRI** TITLE: **PRODUCTION MANAGER**

SIGNATURE: David Veltri / Shirley Mitchell DATE: 01/08/08

E-MAIL ADDRESS: **david.veltri@elpaso.com**

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: **EL PASO E & P COMPANY, L.P.**

WELL NAME & NUMBER: **VPR A 500** " " (Well)

WELL LOCATION: **332 FSL & 2549 FEL** (FOOTAGE LOCATION) **O** (UNIT LETTER) **30** (SECTION) **31N** (TOWNSHIP) **21E** (RANGE)

WELLBORE SCHEMATIC

(SEE ATTACHMENT A)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: **17 ½"** Casing Size: **13 3/8"**

Cemented with: **230** sx. ***or*** **350** ft³

Top of Cement: **Surface** Method Determined: ______

Intermediate Casing

Hole Size: **12 1'4"** Casing Size: **9 5/8"**

Cemented with: **580** sx. ***or*** **3,970** ft³

Top of Cement: **Surface** Method Determined: ______

Production Casing

Hole Size: **8 3/4"** Casing Size: **7 "**

Cemented with: **880** sx. ***or*** **6,815** ft³

Top of Cement: **Surface** Method Determined: ______

Total Depth: **7122'**

Injection Interval

Glorieta feet to **6,815'**

(Perforated or Open Hole; indicate which) 6815 / 2 / 13830

INJECTION WELL DATA SHEET

Tubing Size: **3 ½" / 2 7/8"** Lining Material: _____

Type of Packer: **PDC drillable float shoe. PDC drillable float collar. Thread Lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing and every third joint thereafter.**

Packer Setting Depth: _____

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? **X** Yes _____ No

   If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: **Glorieta Sandstone**

3. Name of Field or Pool (if applicable): **Vermejo Park Ranch**

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. **No**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   The Raton and Vermejo coal beds overlay the area of the proposed well. They will be sealed from the wellbore by 9 5/8" intermediate and 7" casing.

El Paso E & P Company, L.P.
Vermejo Park Ranch "A", Well # 500 Water Disposal
332 FSL & 2549 FEL
Section 30, T 31N, R 21E
Colfax County, New Mexico

Additional Data

V. Map attached - "Attachment B", two mile & ½ mile radius area of review.

VI. Area of Review:

There are no Water Disposal Well within one half mile of the proposed disposal well that is currently injecting produced water into the Glorieta.

VII. Operation Data:

1. Proposed average daily injection volume: 20,000 BWPD
   Proposed maximum daily injection volume: 20,000 BWPD

2. This well will be a closed system.

3. Proposed average daily injection pressure: 1,500 psi
   Proposed maximum daily injection pressure: 1,500 psi

4. Sources of injection/disposal water will be from the Vermejo and Raton Formation CBM wells that have been drilled or are scheduled to be drilled on the Vermejo Park Ranch.

5. Chemical analysis of water zones will be obtained by Baker Petrolite Laboratories and Ed Martin, District 4, Oil Conservation Division, Santa Fe, NM.

VIII. Geological Data (Geologic Well Prognosis Report) – "Attachment C"

Information pertaining to the lithological details and thickness have been estimated based on the VPR A 352 well, located in Section 31, T31N, R21E.

IX. Stimulation Program

No stimulation program.

X. Logs and Test Data

The Oil Conservation Division, Att: Ed Martin, Santa Fe, NM, is on the distribution list for all logs.

XI. Fresh Water

Ed Martin, OGCD, will take fresh water samples during drilling.

XII. Statement

To the best of our current knowledge of the area, there is no evidence of open faults or other hydrologic connection between and disposal zone and underground sources of drinking water.

El Paso E & P Company, L.P.
Vermejo Park Ranch "A", Well # 500 Salt Water Disposal
332 FNL & 2549 FEL
Section 30, T 31N, R 21E
Colfax County, New Mexico

XIII. Proof of Notice attached as "Attachment D"

Surface Owner:

Vermejo Park, L.L.C.
PO Drawer E
Raton, NM 87740

Working/Offset & Royalty Owners:

El Paso E & P Corporation has 100% working interest.
There are no partners.

XIV. Certification: Form C-108 "Application for Authorization to Inject".

Copies of the Oil Conservation Division, Form C-108 have been sent to the above stated parties by Certified Mail on this 8th day of January, 2008.

David Veltri / Shirley Mitchell

David Veltri, Production Manager
El Paso E & P Company, L.P.
PO Box 190
Raton, NM 87740

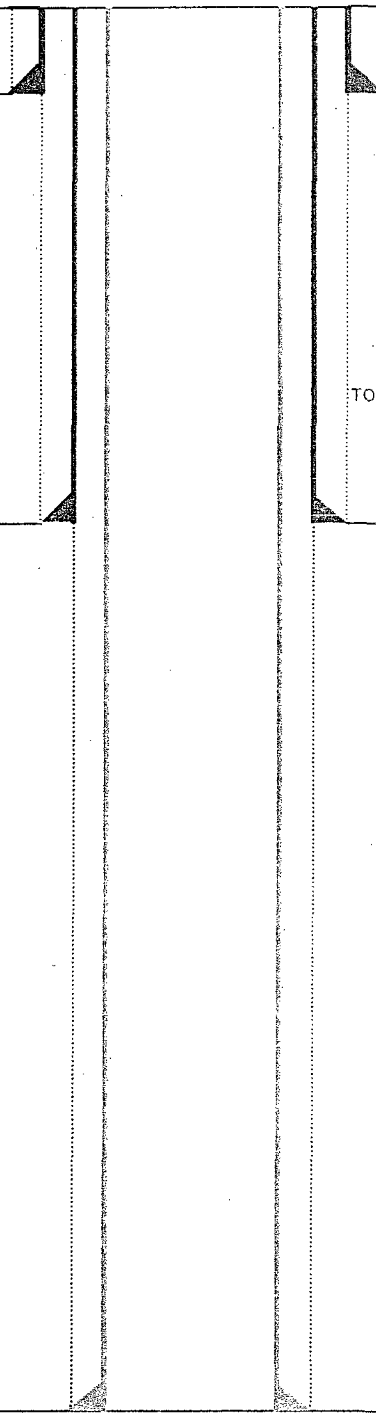
ATTACHMENT A

elpaso Production

Drilling Schematic

Company Name:	El Paso Exploration & Production	**Date:**	October 26, 2007
Well Name:	**VPR A 500 WDW**	**TD:**	7,122
Field, County, State:	VPR, Colfax, NM	**AFE #:**	
Surface Location:	' FNL ' FWL Sec 30 T31N R21E	**BHL:**	Straight Hole
Objective Zone(s):	Glorieta	**Elevation:**	8046
Rig:		**Spud (est.):**	January 2, 2008
BOPE Info:	13-3/8" 5k double, annular, 500psi rotating head		

LOGS	TOPS	DEPTH
	Raton	77
		350 ' MD/TVD
	Vermejo	1,877
Triple Combo, Dipole, FMI		
	Trinidad SS	2,042
	Pierre	2,150
	Niobrara	3,920
		3,970 ' MD/TVD
	Niobrara B	4,900
Triple Combo, Dipole, FMI		
	Niobrara C	5,260
	Fort Hays	5,490
	Carlisle	5,510
	Bridge Creek	5,690
	Dakota	5,890
	Morrison	6,140
	Entrada	6,444
	Glorieta	6,815
		7,122 ' MD/TVD



TOC @ 3770'

MECHANICAL

HOLE SIZE	CASING SIZE	MUD WEIGHT
17-1/2"	13 3/8" 48ppf H-40 STC	8.3-8.7 WBM
12-1/4"	9-5/8" 40ppf J-55 LTC	8.3-8.8 ppg WBM
5-3/4	[illegible]	[illegible] WBM

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR	CPLG	DESIGN FACTORS BURST	COLLAPSE	TENSION
						1,730	740	322
SURFACE	13 3/8"	0 - 350	48	H-40	STC	21.45	4.52	7.51
						3,950	2,570	453
INTERMEDIATE	9-5/8"	0 - 3970	40	J-55	LTC	1.95	1.38	1.75
PRODUCTION	7"	0 - 7122	26	P-110	LTC	1.75	2.17	

CEMENT PROGRAM		FT OF FILL	DESCRIPTION	SYCKS	EXCESS	Weight ppg	YIELD cuft/sk
SURFACE		350	Trinidad Surface Cement	230	50%	14	1.65
INTERMEDIATE	Lead	3,470	Tuned Lite Blend	580	15%	10.0	2.16
	Tail	500	Trinidad production blend	160	15%	15.8	1.14
PRODUCTION	Lead	2,352	Trinidad production blend	580	15%	10.80	1.47
	Tail	600	Trinidad production blend	140	15%	14.0	1.65

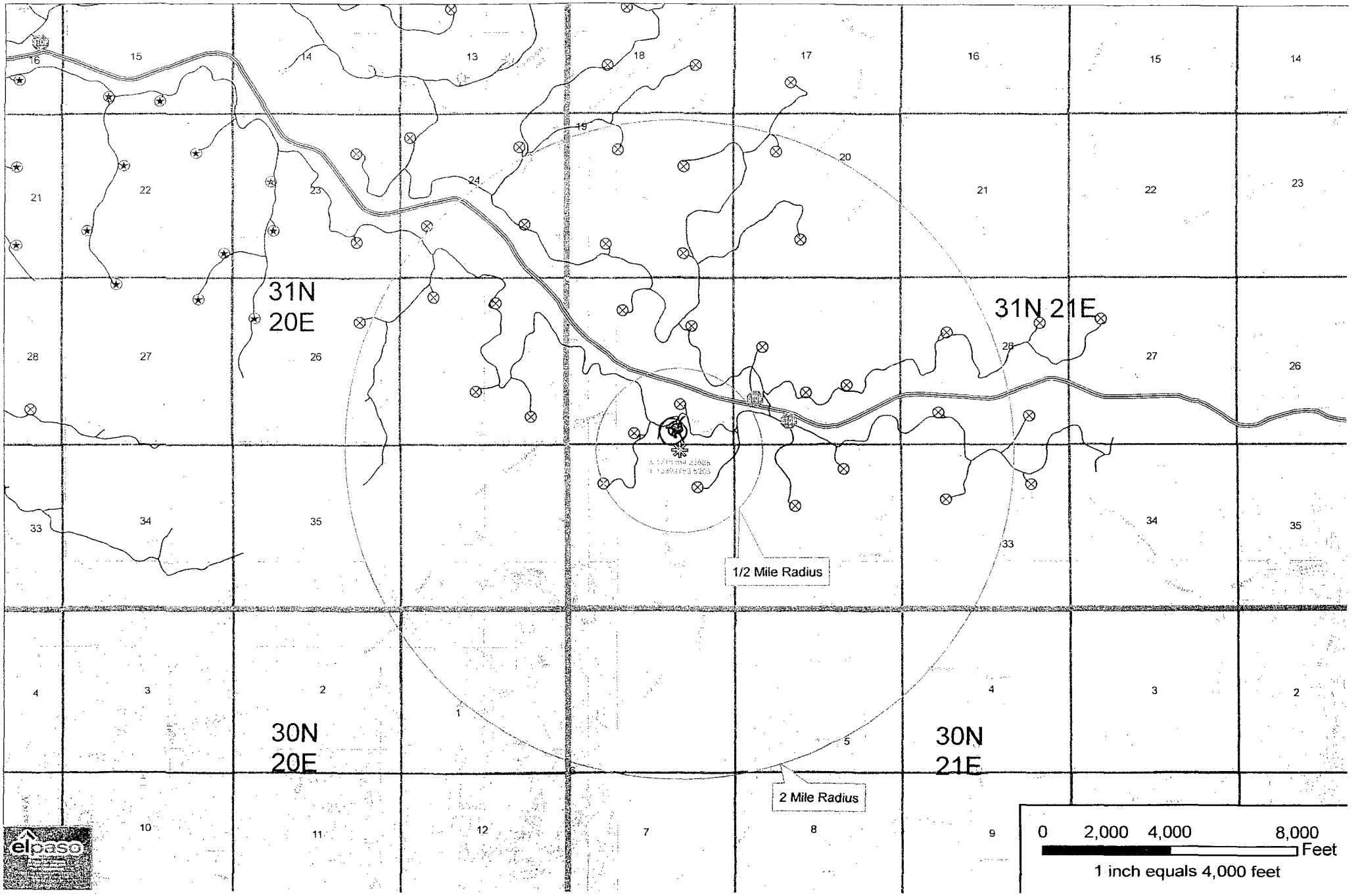
FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	PDC drillable float shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
INTERMEDIATE	PDC drillable float shoe, 2 joints casing, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
PRODUCTION	PDC drillable float shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints and 1 every 3rd joint up to TOC thereafter.

PROJECT ENGINEER(S): Alex Erhardt

MANAGER: David Veltri

VPR A 500 Salt Water Disposal "Attachment B"



ATTACHMENT C

DRILLING WELL PROGNOSIS / DATA SHEET

Date: 15-Oct-2007

Operator Name:	El Paso Production Company	Project:	2007 Raton Basin
Area Geologist:	Fred Mark (CBM) / Gus Gustason (expl)	Geologic Prognosis:	Fred Mark / Gus Gustason
Well Name & Number:	VPR A 500 Salt Water Disposal	Phone:	Office: 303-291-6450
Location (footage):	FNL FWL		
Sec-Twnshp-Range:	NW Sec 31 T31N R21E		
County:	Colfax State: CO		
Field Name:	VPR Primary Obj: Glorieta Sandstone		
NMOCD Prop. TD	Prop. TD 7,122		
Elevation (Approx):	8,046 GL		
Drilling Engineer:			
Drilling Contractor:			

Field Log Requirements	
Log Prints (left on location):	1
Log Prints (Raton Office):	
Log Prints (Oper. Geologist):	2
Log Prints (EPPC,Houston):	4
LOGNET* (Details Below):	2

Preliminary Formation Tops:	Tops		Zone Characterization				
	Depth	Datum	Gas	Water	Fracture	Intruded	Bentonite
Surface - Poison Canyon	0	8,046					
Raton	77	7969	X	X	X	X	
Vermejo Formation	1,877	6169	X	X	X	X	
Trinidad Sandstone	2,042	6004		X	X		
Pierre	2,150	5896	X		X		
Niobrara	3,920	4126	X		X		
Niobrara B	4,900	3146	X		X		
Niobrara C	5,260	2786	X		X		
Fort Hays	5,490	2556	X		X		
Carlile	5,510	2536	X		X		
Bridge Creek	5,690	2356	X		X		X
Dakota	5,890	2156	X	X	X		
Morrison	6,140	1906	X	X	X		
Entrada	6444	1602	X	X	X		
Glorieta	6815	1231	X	X	X		
TD							
Total Depth:	7,122						

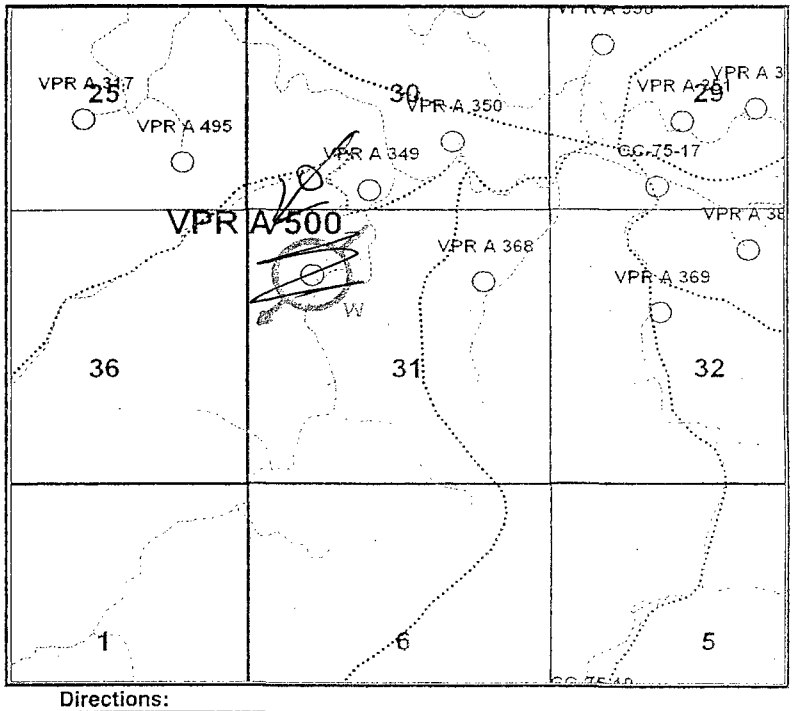
* Send LOGNET to EPPC, Houston
(Details here)
E-mail .LAS format file to
fred.mark@elpaso.com
Open-Hole Logging Program
1) Short and Long Spaced Resistivity
2) Comp RHOB - Standard and High Res
3) Neutron and Density Porosity
4) SP, API GR, Photo Electron
5) Caliper, Tension
6) Formation Image Log / Dipole Sonic
7) Directional Survey

No Logs Run Over the Raton - Trinidad Sx

Est. of Fluid in Hole: 950'
Surface String Size:
Surface Casing Depth:
Production String Size:
Production Casing Depth:

Wireline Logging Co.:
TD - B/SC
To Be Determined

Vertical Well Top of Cement = 860'
This prognosis is for a vertical well.



Survey Plat: API #
Latitude NAD 27 36.88181
Longitude NAD 27 -104.751
Conditions of Approval:

Directions:

VPR A 500
SALT WATER DISPOSAL
DRILLING PROCEDURE

Move in rig

Drill 17-1/2" hole to 350' with water and gel based spud mud.

Circulate and condition hole and run 13-3/8" 48 ppf H-40 STC casing.

Cement casing with 230 sx (50% excess) Trinidad Surface cement, top out with 1" if there is fall back.

Swap mud to Aphron system, (polymer-water based mud system designed to prevent formation damage and lost returns) and rig up mud loggers.

Drill 12-1/4" hole to 3970, circulate and condition hole.

Log hole with quad combo and FMI.

Run 9-5/8" 40 ppf J-55 LTC. Cement in place with tuned light lead 15% excess to surface and 500' of 15.8ppg tail with 15% excess.

Drill 8-3/4" hole to 7122' TD with same Aphron mud system to mitigate lost returns.

Condition hole and log with quad combo and FMI.

Run and cement 7" 26 ppf P-110 casing to 7,122' with 15% excess. Planned top of cement is 200' into intermediate casing (3770').

The aphron system is a water based polymer system that encapsulates tiny bubbles of air inside polymer which will help it have some of the same non damaging properties of oil based mud, but without an of the environmental concerns. It also has an extremely high low shear rate viscosity which makes it ideal for stopping losses in fracture systems. It is also a very inhibitive system because it will let off very little filtrate into the formation.

ATTACHMENT D

elpaso

EL PASO E & P COMPANY, L.P.
P.O. BOX 190 - RATON, N.M. 87740

November 7, 2007

Vermejo Park Ranch
PO Drawer E
Raton, NM 87740

Attention: Mr. Mark Kossler

Subject: Notice of Drilling Water Injection Well VPR A 500 WDW

Dear Mark:

This correspondence is to serve notice that El Paso E & P Company, L.P., plans to drill and complete a produced water injection well in the NW ¼ of Section 31, T31N, R21E in Colfax County. The well will be called the "VPR A 500 WDW".

Produced water from coalbed methane wells will be injected into the Glorieta formations at approximate depth 7,122' MD.

Respectfully,

David Veltri
Production Manager

DV:sam

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO)
) ss.
COUNTY OF COLFAX)

The undersigned, being first duly sworn according to law, on his/her oath deposes and says that he/she is the business manager of the newspaper named "The Raton Range" and that he/she has personal knowledge of the facts stated herein; that the said "The Raton Range" is a twice-weekly newspaper of general paid circulation printed and published in the County of Colfax and State of New Mexico and entered under the Second class postal privilege in said County, and having been uninterruptedly and continuously printed and published in said County during the period of more than six months to the date of publishing of the first issue of the publication next prior or notice concerning which this affidavit is made and a copy of which is hereto attached; that said newspaper is duly qualified for that purpose under the laws of the state of New Mexico; that the publication, a printed copy of which is hereto attached and made a part of this affidavit, was published in said newspaper 2 each week for 2 successive weeks, said paid publication having been made on the following dates, to-wit:

First Publication: The 16 day of November, 2007
Second Publication: The 20 day of November, 2007
Third Publication: The 23 day of November, 2007
Fourth Publication: The 27 day of November, 2007
Fifth Publication: The _____ day of _____, 2007
Sixth Publication: The _____ day of _____, 2007

Business Manager

Subscribed and sworn to before me this 27 day of November, 2007

Notary Public

OFFICIAL SEAL
Crystal Rivera
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 12/15/08

PUBLISHER'S BILL

_____ Insert(s) _____ Time(s) _____.____ Cost
58 Lines 4 Time(s) $125.64 Cost
_____ Col. Inches _____ Time(s) _____.____ Cost

151 LEGALS

NOTICE OF APPLICATION for Fluid Injection Well Permit

El Paso E&P Company, L.P., 1001 Louisiana Street, Houston, Texas is seeking administrative approval from the New Mexico Oil Conservation Division to complete their Vermejo Park Ranch, A 500 WDW, located in Section 30, T31N, R21E Colfax County, Vermejo Park Ranch, New Mexico as water disposal well The proposed interval is the Glorieta formation from an estimated depth of 7,122' MD. The El Paso E&P Company, L.P. intends to inject a maximum of 20,000 bbls of produced formation water per day per well at a maximum injection pressure of 1500 psi. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505, within 15 days of this notice.

/s/David Veltri, Production Manager
El Paso E&P Company, L.P.
PO Box 190
Raton, NM 87740
(575) 445-6721
(575) 445-6788 Fax

Legal No. 616507 Published in The Raton Range: November 16, 20, 23 and 27, 2007.

Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382514
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77332
Entity (or well #):	349	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3006.1
Density (g/cm3, tonne/m3):	1.002
Anion/Cation Ratio:	1.0000004
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382514 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**124.0**	**3.5**	**Sodium:**	**833.1**	**36.24**
Bicarbonate:	**1971.0**	**32.3**	**Magnesium:**	**2.0**	**0.16**
Carbonate:	**43.0**	**1.43**	**Calcium:**	**5.0**	**0.25**
Sulfate:	**4.0**	**0.08**	**Strontium:**	**1.0**	**0.02**
Phosphate:			**Barium:**	**1.0**	**0.01**
Borate:			**Iron:**	**6.0**	**0.22**
Silicate:			Potassium:	16.0	0.41
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
			Lead:		
pH at time of analysis:		8.41	Manganese:	0.030	0.
pH used in Calculation:		**8.41**	Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.63	3.15	-4.44	0.00	-4.51	0.00	-3.37	0.00	-0.26	0.00	0.11
100	0	0.66	3.49	-4.46	0.00	-4.46	0.00	-3.34	0.00	-0.39	0.00	0.18
120	0	0.69	3.49	-4.46	0.00	-4.39	0.00	-3.31	0.00	-0.50	0.00	0.27
140	0	0.72	3.49	-4.46	0.00	-4.29	0.00	-3.26	0.00	-0.59	0.00	0.42

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

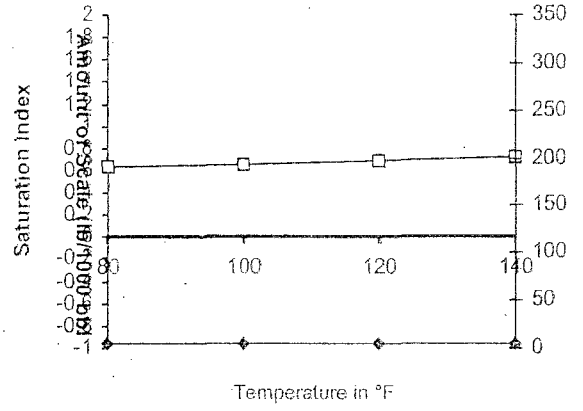
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

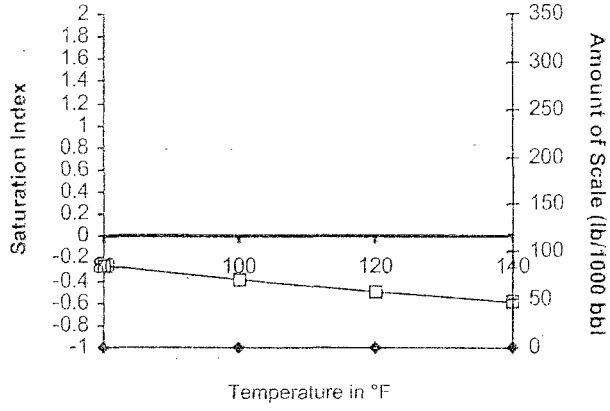
Scale Predictions from Baker Petrolite

Analysis of Sample 382514 @ 75 °F for EL PASO PRODUCTION, 11/19/07

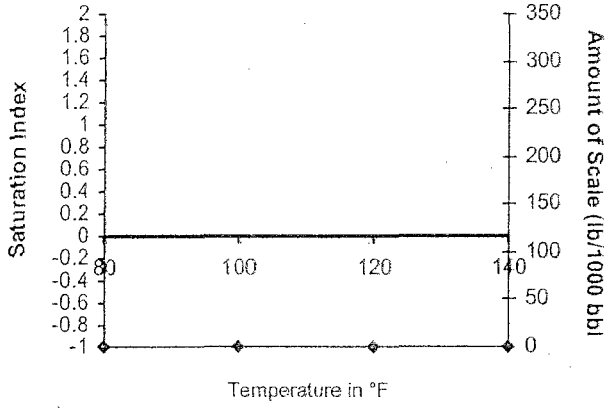
Calcite - CaCO3



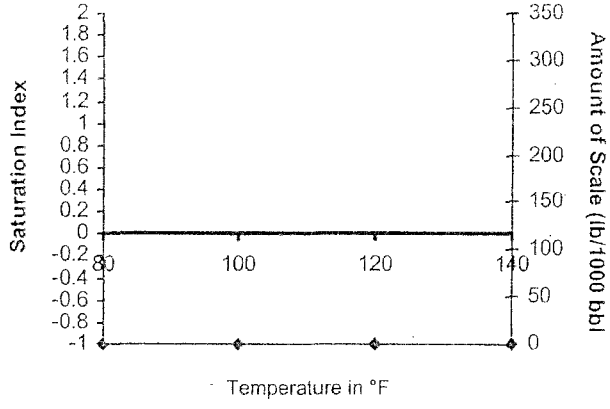
Barite - BaSO4



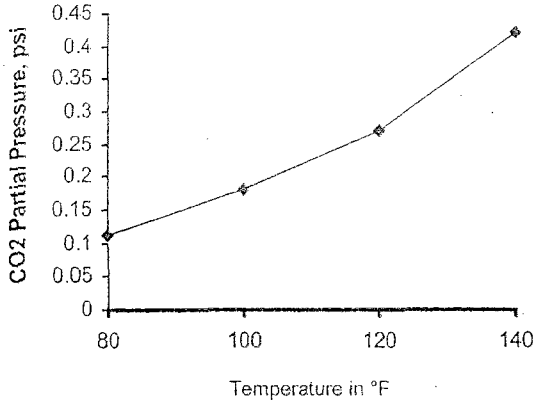
Gypsum - CaSO4*2H20



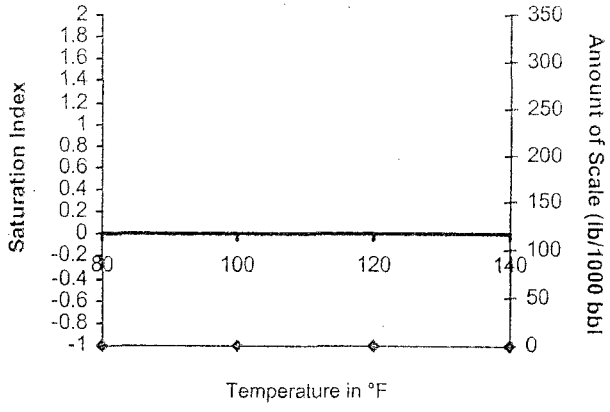
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382515
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77334
Entity (or well #):	350	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3669.5
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	0.9999997
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382515 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**614.0**	**17.32**	**Sodium:**	**1103.4**	**48.**
Bicarbonate:	**1884.0**	**30.88**	**Magnesium:**	**2.5**	**0.21**
Carbonate:	**31.0**	**1.03**	**Calcium:**	**9.0**	**0.45**
Sulfate:	**3.0**	**0.06**	**Strontium:**	**2.0**	**0.05**
Phosphate:			**Barium:**	**2.0**	**0.03**
Borate:			**Iron:**	**8.5**	**0.31**
Silicate:			Potassium:	10.0	0.26
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.34	Lead:		
pH used in Calculation:		**8.34**	Manganese:	0.050	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4{*}2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.77	6.29	-4.36	0.00	-4.43	0.00	-3.24	0.00	-0.14	0.00	0.12
100	0	0.80	6.29	-4.38	0.00	-4.38	0.00	-3.22	0.00	-0.28	0.00	0.19
120	0	0.83	6.64	-4.38	0.00	-4.31	0.00	-3.19	0.00	-0.39	0.00	0.3
140	0	0.86	6.64	-4.38	0.00	-4.21	0.00	-3.14	0.00	-0.47	0.00	0.47

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

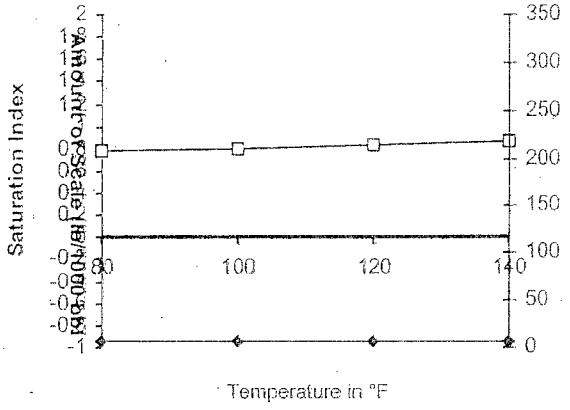
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

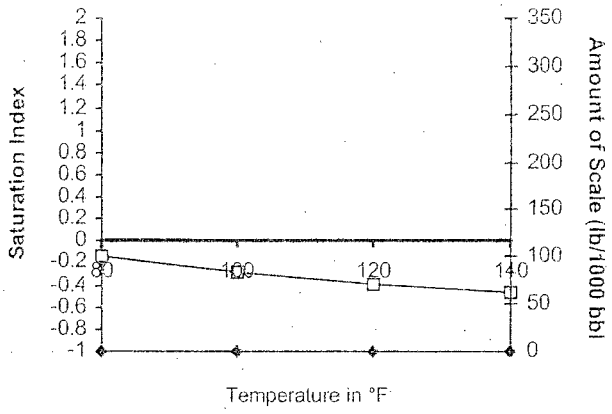
Scale Predictions from Baker Petrolite

Analysis of Sample 382515 @ 75 °F for EL PASO PRODUCTION, 11/19/07

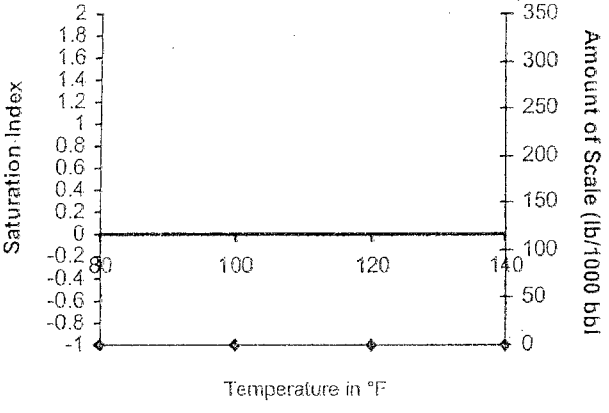
Calcite - CaCO3



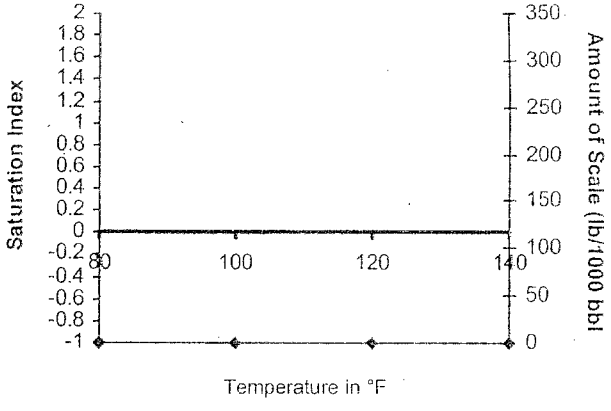
Barite - BaSO4



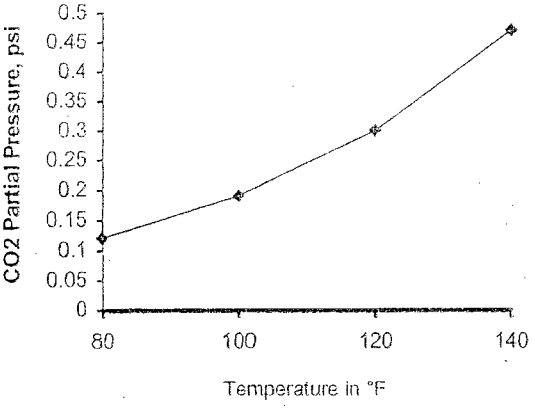
Gypsum - CaSO4*2H20



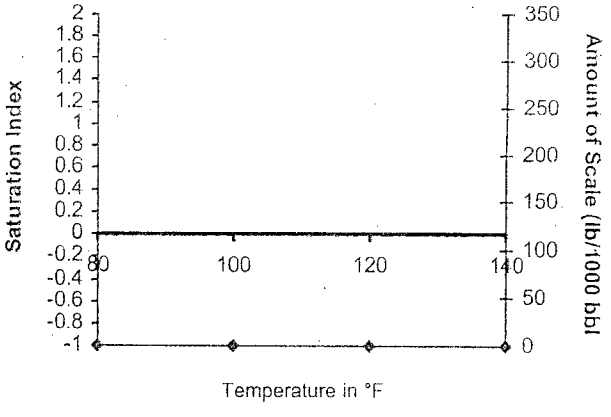
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382513
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77336
Entity (or well #):	352	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3242.9
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	0.9999999
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382513 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**109.0**	**3.07**	**Sodium:**	**891.4**	**38.77**
Bicarbonate:	**2163.0**	**35.45**	**Magnesium:**	**1.5**	**0.12**
Carbonate:	**40.0**	**1.33**	**Calcium:**	**7.0**	**0.35**
Sulfate:	**5.0**	**0.1**	**Strontium:**	**1.0**	**0.02**
Phosphate:			**Barium:**	**1.5**	**0.02**
Borate:			**Iron:**	**6.5**	**0.23**
Silicate:			Potassium:	17.0	0.43
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.38	Lead:		
pH used in Calculation:		**8.38**	Manganese:	0.030	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.77	4.89	-4.22	0.00	-4.29	0.00	-3.29	0.00	0.00	0.00	0.13
100	0	0.80	4.89	-4.24	0.00	-4.24	0.00	-3.27	0.00	-0.14	0.00	0.2
120	0	0.83	5.24	-4.24	0.00	-4.17	0.00	-3.23	0.00	-0.25	0.00	0.32
140	0	0.86	5.24	-4.24	0.00	-4.08	0.00	-3.18	0.00	-0.33	0.00	0.49

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

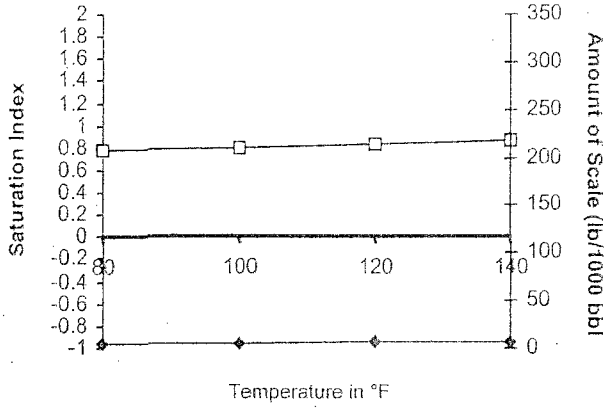
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

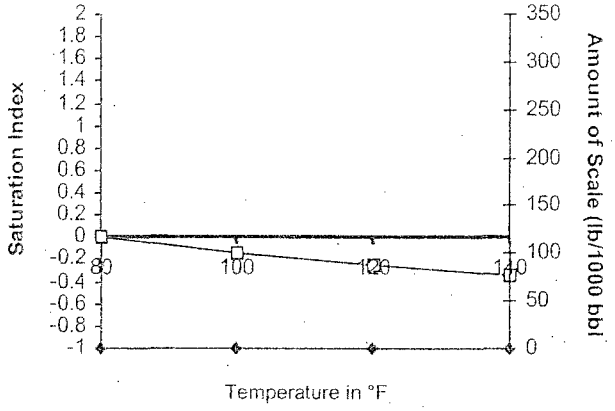
Scale Predictions from Baker Petrolite

Analysis of Sample 382513 @ 75 °F for EL PASO PRODUCTION, 11/19/07

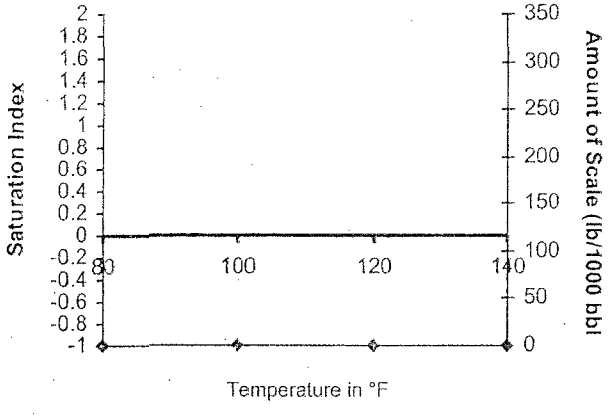
Calcite - CaCO3



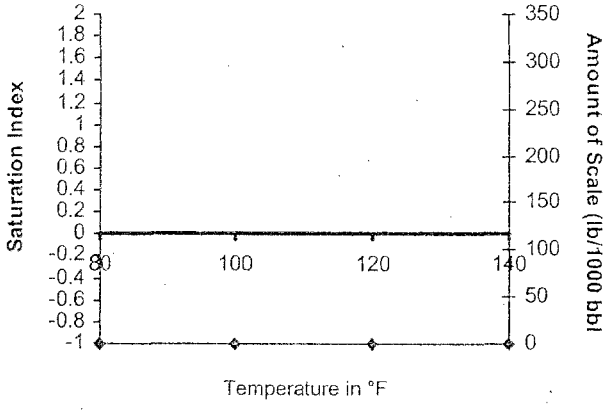
Barite - BaSO4



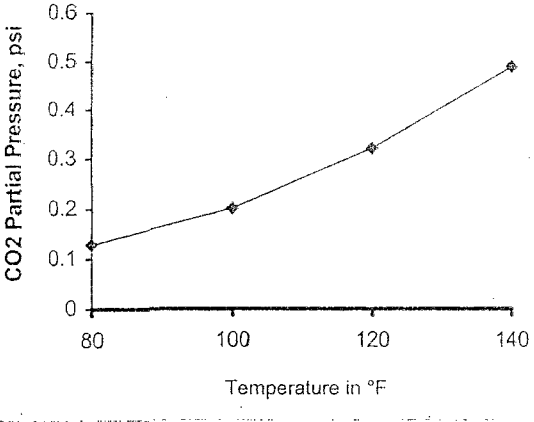
Gypsum - CaSO4*2H20



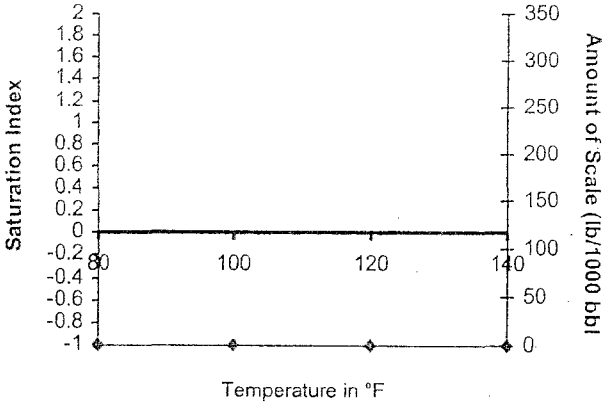
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382506
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77337
Entity (or well #):	368	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	2863.5
Density (g/cm3, tonne/m3):	1.002
Anion/Cation Ratio:	0.9999998
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382506 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**139.0**	**3.92**	**Sodium:**	**792.5**	**34.47**
Bicarbonate:	**1866.0**	**30.58**	**Magnesium:**	**1.5**	**0.12**
Carbonate:	**27.0**	**0.9**	**Calcium:**	**4.5**	**0.22**
Sulfate:	**6.0**	**0.12**	**Strontium:**	**1.0**	**0.02**
Phosphate:			**Barium:**	**1.0**	**0.01**
Borate:			**Iron:**	**3.0**	**0.11**
Silicate:			Potassium:	22.0	0.56
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.33	Lead:		
pH used in Calculation:		**8.33**	Manganese:	0.025	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.51	2.80	-4.28	0.00	-4.35	0.00	-3.17	0.00	-0.06	0.00	0.12
100	0	0.54	2.80	-4.30	0.00	-4.30	0.00	-3.14	0.00	-0.20	0.00	0.19
120	0	0.58	2.80	-4.31	0.00	-4.23	0.00	-3.11	0.00	-0.31	0.00	0.3
140	0	0.63	2.80	-4.30	0.00	-4.14	0.00	-3.06	0.00	-0.39	0.00	0.44

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

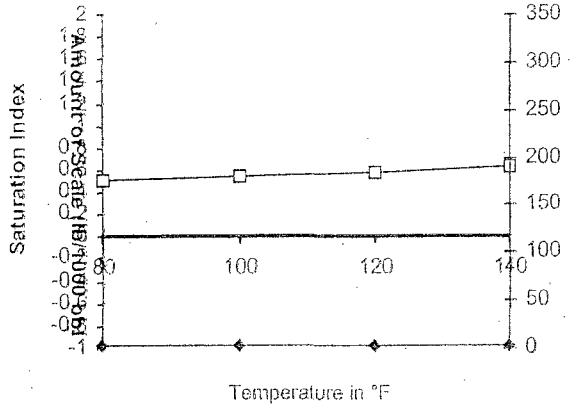
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

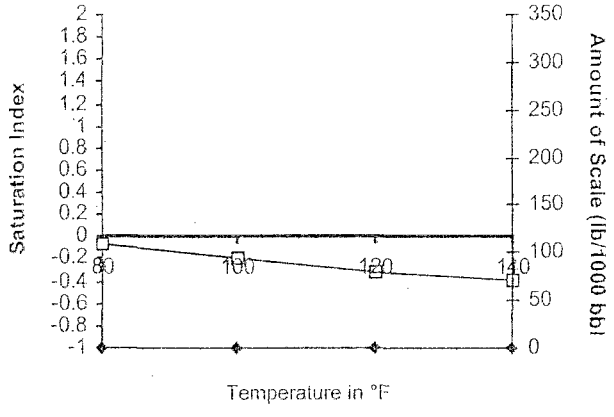
Scale Predictions from Baker Petrolite

Analysis of Sample 382506 @ 75 °F for EL PASO PRODUCTION, 11/19/07

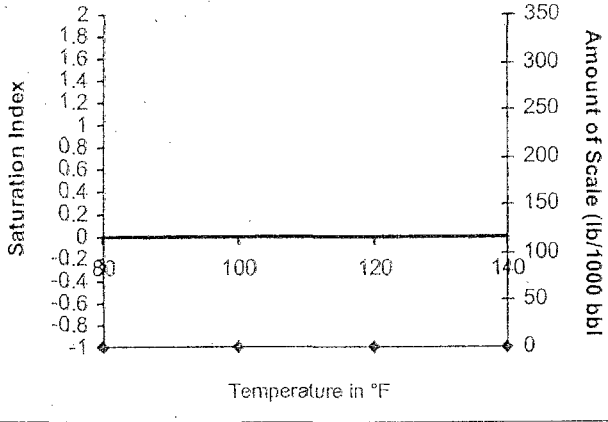
Calcite - CaCO3



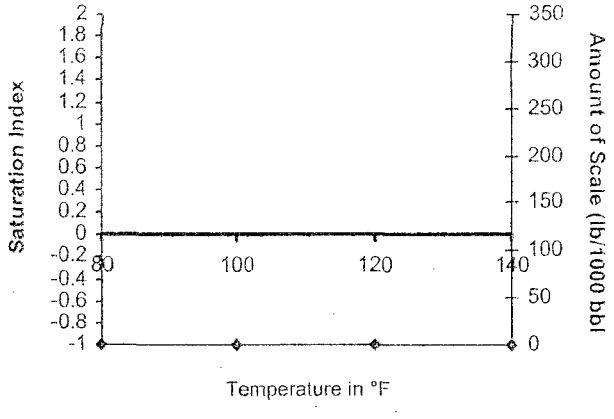
Barite - BaSO4



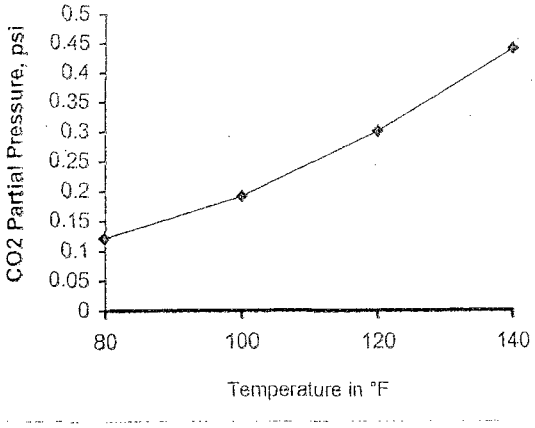
Gypsum - CaSO4*2H20



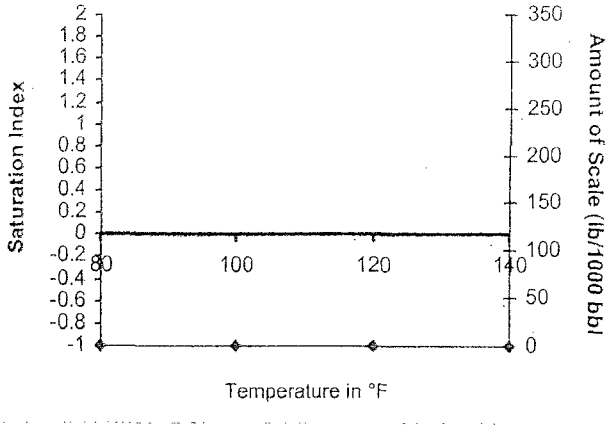
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382509
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77322
Entity (or well #):	313	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	8302.3
Density (g/cm3, tonne/m3):	1.007
Anion/Cation Ratio:	0.9999999
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382509 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**4316.0**	**121.74**	**Sodium:**	**2867.3**	**124.72**
Bicarbonate:	**836.0**	**13.7**	**Magnesium:**	**22.0**	**1.81**
Carbonate:	**0.0**	**0.**	**Calcium:**	**137.0**	**6.84**
Sulfate:	**29.0**	**0.6**	**Strontium:**	**19.0**	**0.43**
Phosphate:			**Barium:**	**14.0**	**0.2**
Borate:			**Iron:**	**42.0**	**1.52**
Silicate:			Potassium:	19.0	0.49
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
			Lead:		
pH at time of analysis:		7.73	Manganese:	1.000	0.04
pH used in Calculation:		**7.73**	Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.88	42.06	-2.46	0.00	-2.53	0.00	-1.55	0.00	1.42	7.65	0.19
100	0	0.95	49.01	-2.47	0.00	-2.47	0.00	-1.53	0.00	1.27	7.65	0.27
120	0	1.03	56.66	-2.48	0.00	-2.40	0.00	-1.51	0.00	1.14	7.30	0.38
140	0	1.11	65.00	-2.47	0.00	-2.30	0.00	-1.48	0.00	1.04	7.30	0.53

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

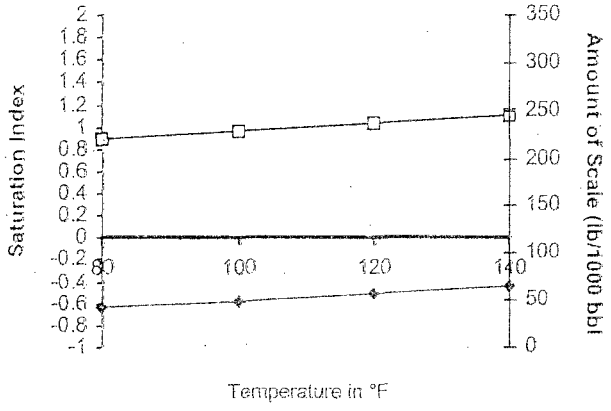
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

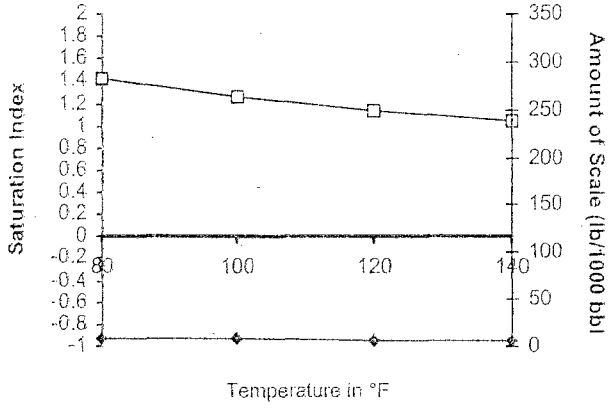
Scale Predictions from Baker Petrolite

Analysis of Sample 382509 @ 75 °F for EL PASO PRODUCTION, 11/19/07

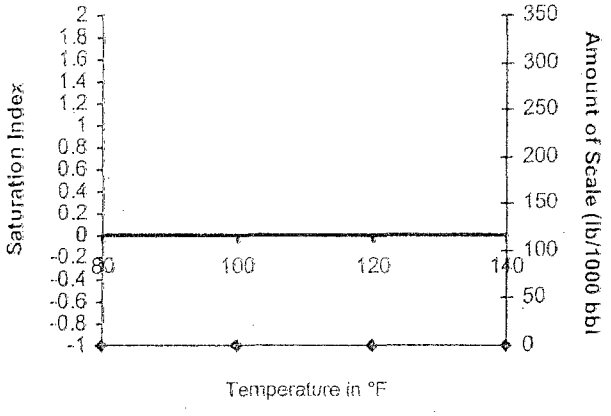
Calcite - CaCO3



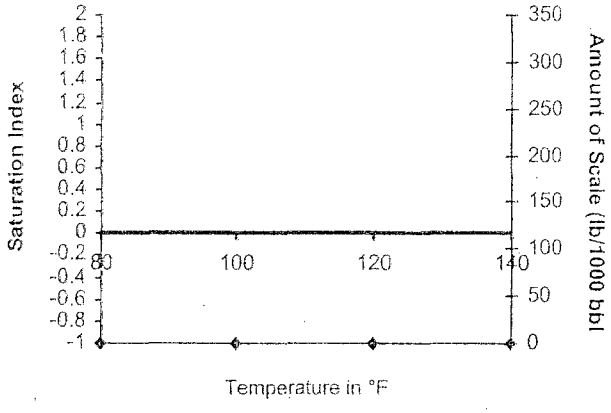
Barite - BaSO4



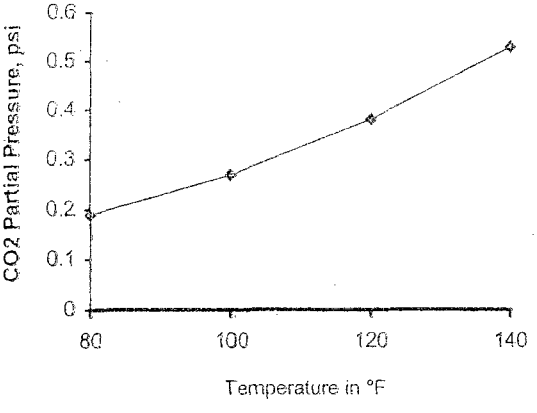
Gypsum - CaSO4*2H20



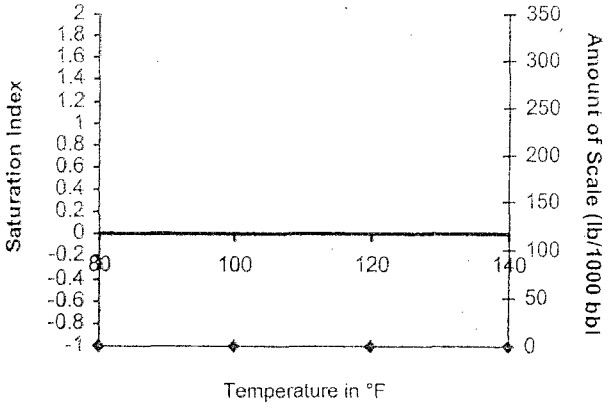
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382507
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77323
Entity (or well #):	314	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3501.3
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	1.0000002
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382507 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**528.0**	**14.89**	**Sodium:**	**1004.6**	**43.7**
Bicarbonate:	**1902.0**	**31.17**	**Magnesium:**	**5.0**	**0.41**
Carbonate:	**0.0**	**0.**	**Calcium:**	**21.0**	**1.05**
Sulfate:	**5.0**	**0.1**	**Strontium:**	**3.5**	**0.08**
Phosphate:			**Barium:**	**3.0**	**0.04**
Borate:			**Iron:**	**13.0**	**0.47**
Silicate:			Potassium:	16.0	0.41
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.13	Lead:		
pH used in Calculation:		**8.13**	Manganese:	0.200	0.01
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.97	15.37	-3.74	0.00	-3.81	0.00	-2.76	0.00	0.28	0.70	0.19
100	0	1.02	15.72	-3.76	0.00	-3.76	0.00	-2.74	0.00	0.14	0.35	0.29
120	0	1.07	16.07	-3.77	0.00	-3.69	0.00	-2.70	0.00	0.02	0.00	0.43
140	0	1.13	16.42	-3.77	0.00	-3.60	0.00	-2.66	0.00	-0.06	0.00	0.62

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

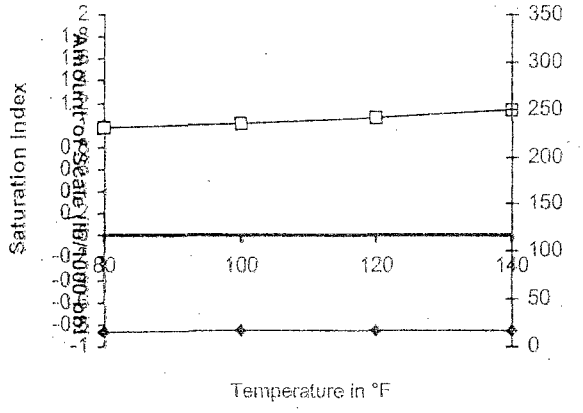
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

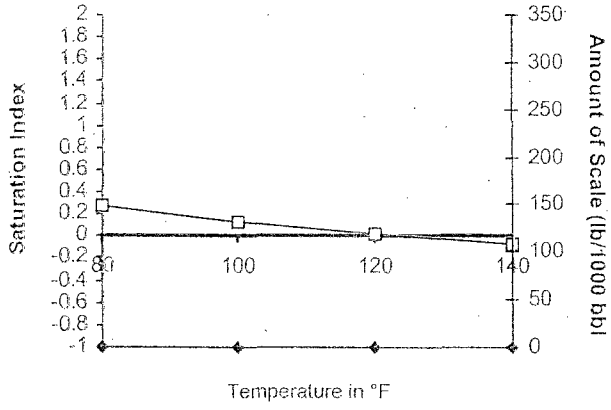
Scale Predictions from Baker Petrolite

Analysis of Sample 382507 @ 75 °F for EL PASO PRODUCTION, 11/19/07

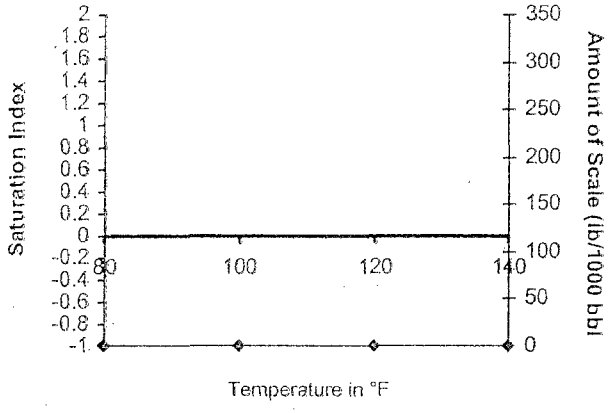
Calcite - CaCO3



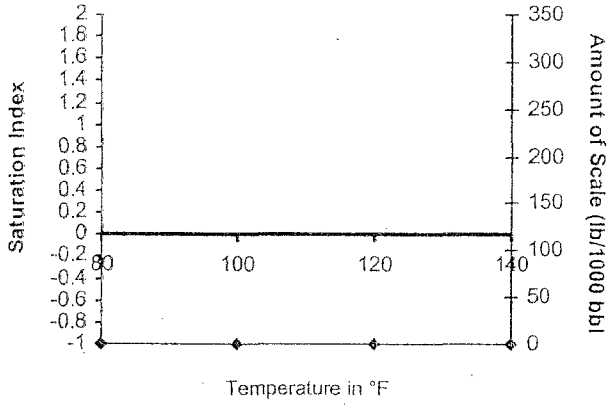
Barite - BaSO4



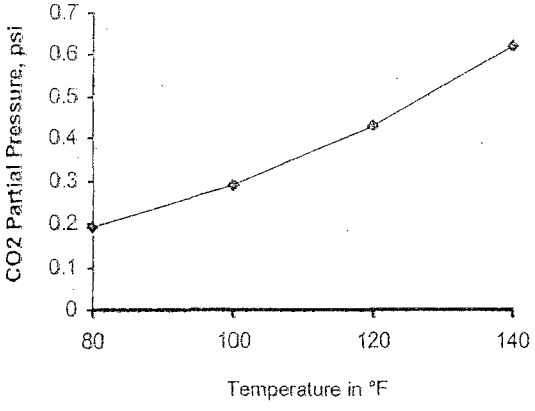
Gypsum - CaSO4*2H20



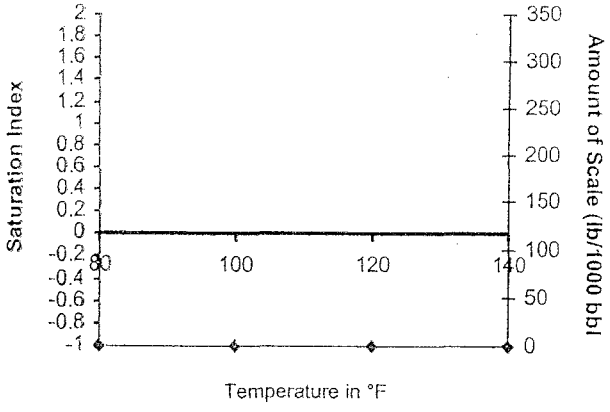
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382508
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77325
Entity (or well #):	315	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3542.7
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	0.9999995
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382508 @ 75 °F

Anions	mg/l	meq/l
Chloride:	**473.0**	**13.34**
Bicarbonate:	**2001.0**	**32.79**
Carbonate:	**0.0**	**0.**
Sulfate:	**4.0**	**0.08**
Phosphate:		
Borate:		
Silicate:		
Hydrogen Sulfide:		
pH at time of sampling:		
pH at time of analysis:		8.17
pH used in Calculation:		**8.17**

Cations	mg/l	meq/l
Sodium:	**1020.1**	**44.37**
Magnesium:	**4.5**	**0.37**
Calcium:	**18.0**	**0.9**
Strontium:	**3.0**	**0.07**
Barium:	**2.5**	**0.04**
Iron:	**4.5**	**0.16**
Potassium:	12.0	0.31
Aluminum:		
Chromium:		
Copper:		
Lead:		
Manganese:	0.100	0.
Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.95	13.27	-3.91	0.00	-3.98	0.00	-2.92	0.00	0.10	0.35	0.18
100	0	1.00	13.62	-3.93	0.00	-3.93	0.00	-2.90	0.00	-0.04	0.00	0.28
120	0	1.05	13.97	-3.94	0.00	-3.86	0.00	-2.87	0.00	-0.15	0.00	0.42
140	0	1.10	14.32	-3.94	0.00	-3.77	0.00	-2.83	0.00	-0.24	0.00	0.61

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

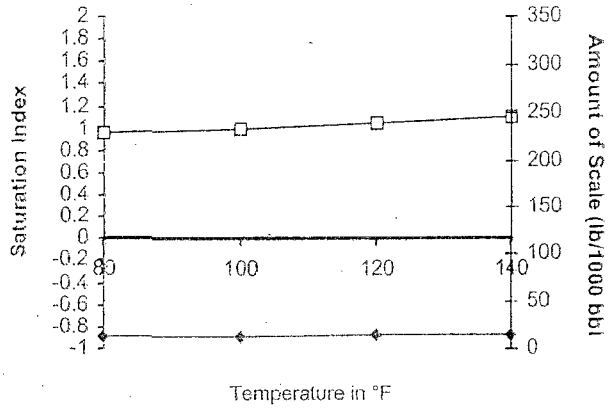
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

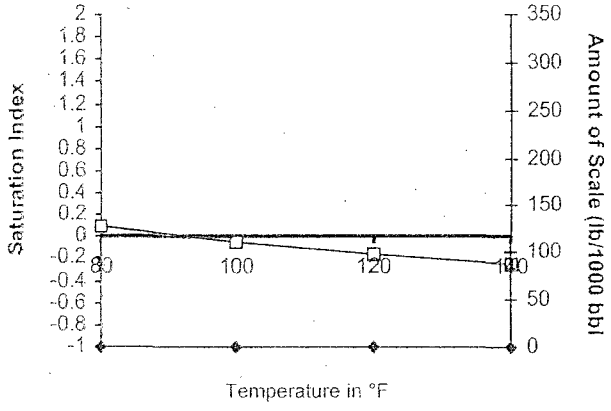
Scale Predictions from Baker Petrolite

Analysis of Sample 382508 @ 75 °F for EL PASO PRODUCTION, 11/19/07

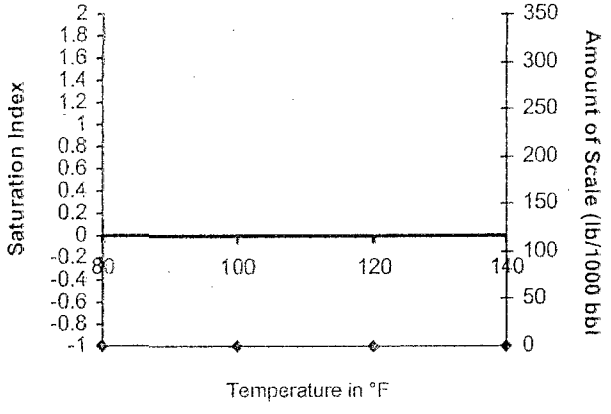
Calcite - CaCO3



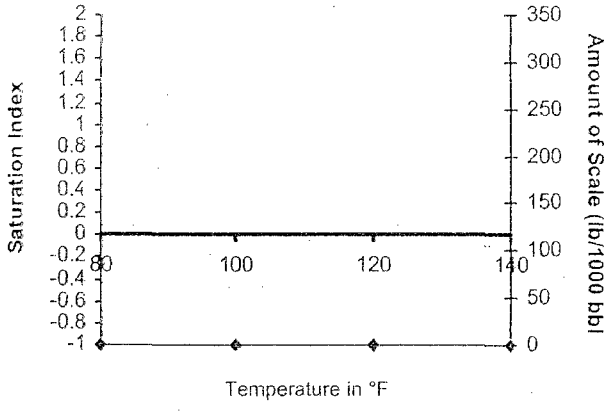
Barite - BaSO4



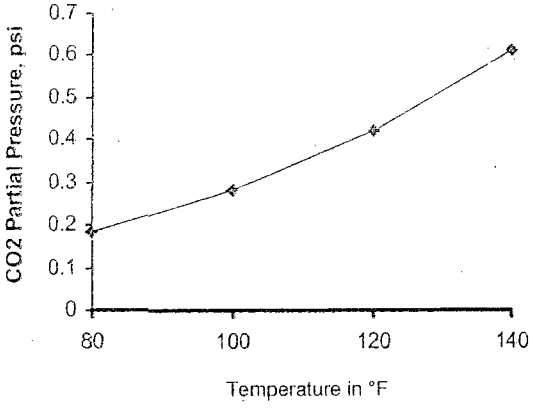
Gypsum - CaSO4*2H20



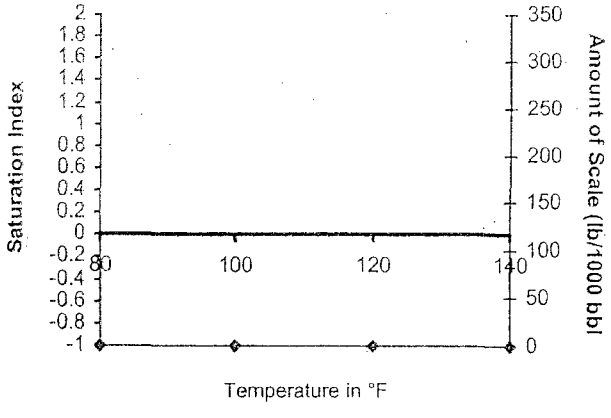
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382510
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77327
Entity (or well #):	316	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3540.6
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	1.0000001
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382510 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**390.0**	**11.**	**Sodium:**	**1006.4**	**43.77**
Bicarbonate:	**2064.0**	**33.83**	**Magnesium:**	**4.0**	**0.33**
Carbonate:	**24.0**	**0.8**	**Calcium:**	**14.0**	**0.7**
Sulfate:	**5.0**	**0.1**	**Strontium:**	**2.0**	**0.05**
Phosphate:			**Barium:**	**2.0**	**0.03**
Borate:			**Iron:**	**10.0**	**0.36**
Silicate:			Potassium:	19.0	0.49
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
			Lead:		
pH at time of analysis:		8.31	Manganese:	0.200	0.01
pH used in Calculation:		**8.31**	Nickel:		

Conditions — Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.98	10.48	-3.94	0.00	-4.01	0.00	-3.01	0.00	0.09	0.35	0.14
100	0	1.01	10.83	-3.95	0.00	-3.96	0.00	-2.99	0.00	-0.04	0.00	0.22
120	0	1.04	10.83	-3.96	0.00	-3.89	0.00	-2.95	0.00	-0.15	0.00	0.35
140	0	1.08	11.18	-3.96	0.00	-3.79	0.00	-2.91	0.00	-0.24	0.00	0.52

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

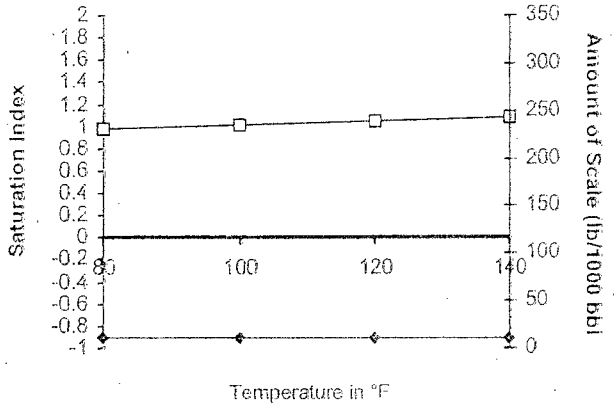
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

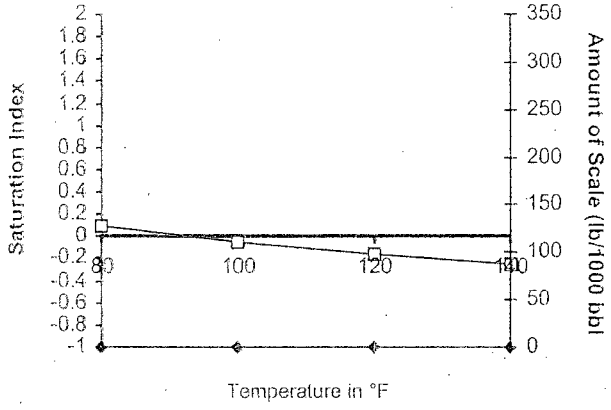
Scale Predictions from Baker Petrolite

Analysis of Sample 382510 @ 75 °F for EL PASO PRODUCTION, 11/19/07

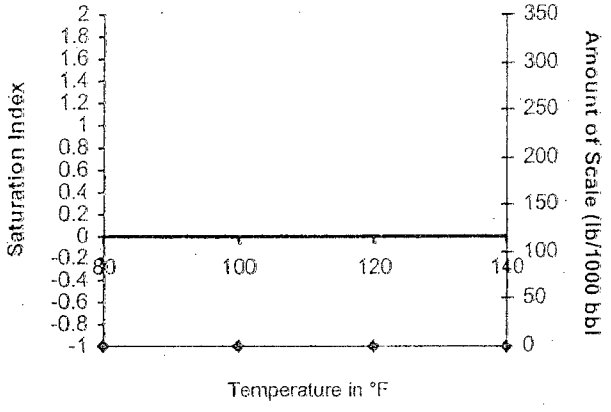
Calcite - CaCO3



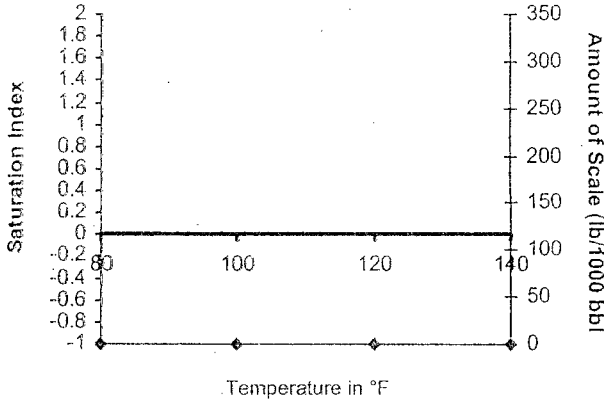
Barite - BaSO4



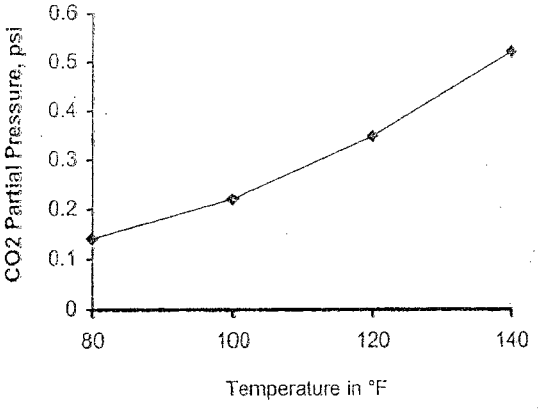
Gypsum - CaSO4*2H20



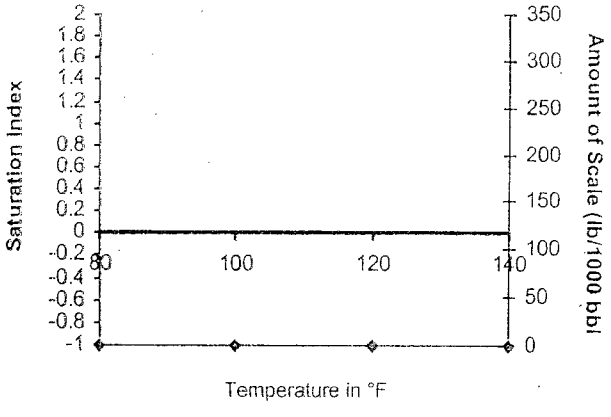
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382511
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77329
Entity (or well #):	317	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	3551
Density (g/cm3, tonne/m3):	1.003
Anion/Cation Ratio:	0.9999999
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382511 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**127.0**	**3.58**	**Sodium:**	**969.4**	**42.17**
Bicarbonate:	**2376.0**	**38.94**	**Magnesium:**	**4.5**	**0.37**
Carbonate:	**33.0**	**1.1**	**Calcium:**	**8.0**	**0.4**
Sulfate:	**4.0**	**0.08**	**Strontium:**	**2.0**	**0.05**
Phosphate:			**Barium:**	**2.0**	**0.03**
Borate:			**Iron:**	**5.0**	**0.18**
Silicate:			Potassium:	20.0	0.51
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		8.33	Lead:		
pH used in Calculation:		**8.33**	Manganese:	0.100	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.81	5.94	-4.28	0.00	-4.35	0.00	-3.11	0.00	0.00	0.00	0.15
100	0	0.83	5.94	-4.30	0.00	-4.30	0.00	-3.08	0.00	-0.14	0.00	0.25
120	0	0.86	5.94	-4.31	0.00	-4.23	0.00	-3.05	0.00	-0.25	0.00	0.38
140	0	0.90	5.94	-4.31	0.00	-4.14	0.00	-3.00	0.00	-0.33	0.00	0.58

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

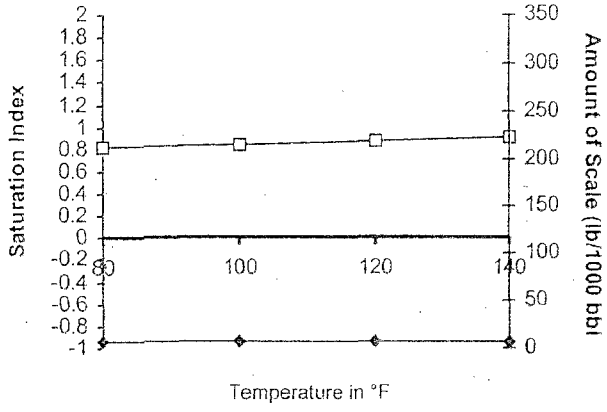
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

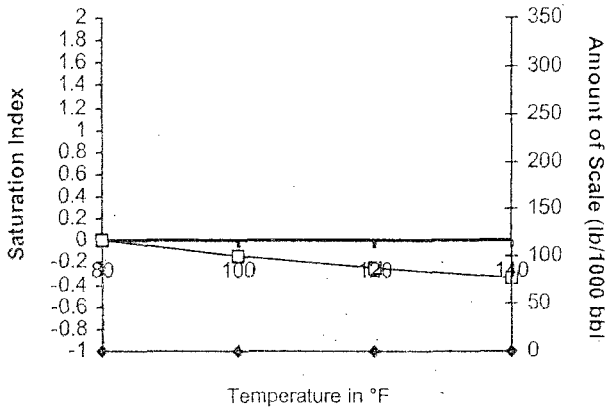
Scale Predictions from Baker Petrolite

Analysis of Sample 382511 @ 75 °F for EL PASO PRODUCTION, 11/19/07

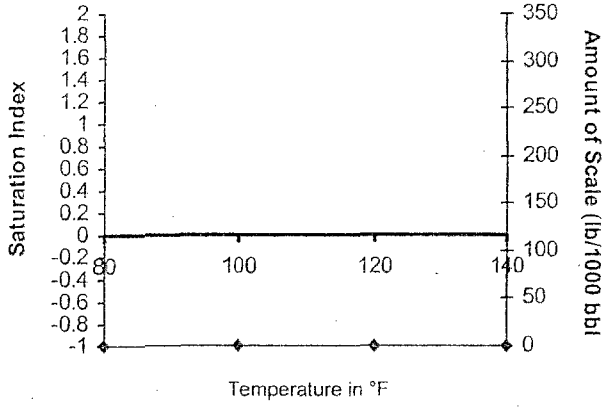
Calcite - CaCO3



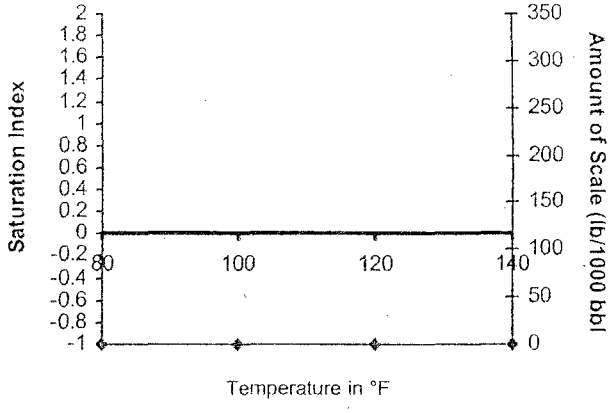
Barite - BaSO4



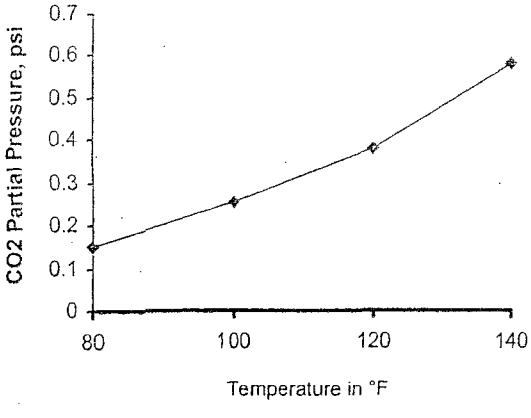
Gypsum - CaSO4*2H20



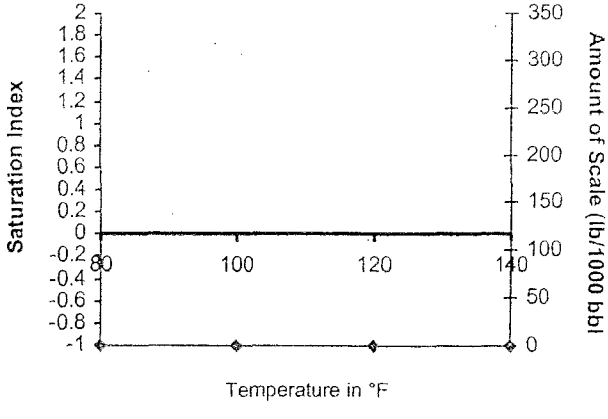
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
(303) 573-2772
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	42410
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	73986
Entity (or well #):	318	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	07/18/07
Analysis Date:	08/01/07
Analyst:	LISA HAMILTON
TDS (mg/l or g/m3):	18449.4
Density (g/cm3, tonne/m3):	1.013
Anion/Cation Ratio:	1
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 42410 @ 75 °F					
Anions	mg/l	meq/l	**Cations**	mg/l	meq/l
Chloride:	**10934.0**	**308.41**	**Sodium:**	**6366.4**	**276.92**
Bicarbonate:	**362.0**	**5.93**	**Magnesium:**	**73.0**	**6.01**
Carbonate:	**0.0**	**0.**	**Calcium:**	**575.0**	**28.69**
Sulfate:	**6.0**	**0.12**	**Strontium:**	**65.0**	**1.48**
Phosphate:			**Barium:**	**40.0**	**0.58**
Borate:			**Iron:**	**5.0**	**0.18**
Silicate:			Potassium:	22.0	0.56
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
pH at time of analysis:		7.42	Lead:		
pH used in Calculation:		**7.42**	Manganese:	1.000	0.04
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.66	21.68	-2.83	0.00	-2.89	0.00	-1.98	0.00	0.91	4.13	0.14
100	0	0.75	26.50	-2.85	0.00	-2.84	0.00	-1.98	0.00	0.75	4.13	0.2
120	0	0.84	32.00	-2.85	0.00	-2.77	0.00	-1.96	0.00	0.62	3.44	0.27
140	0	0.93	38.20	-2.85	0.00	-2.68	0.00	-1.93	0.00	0.51	3.10	0.36

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

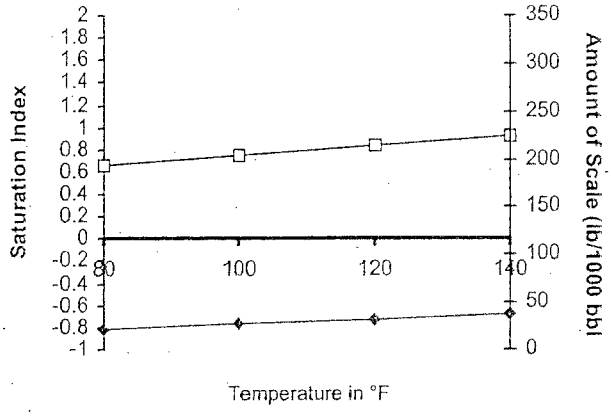
Note 2: Precipitation of each scale is considered *separately*. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

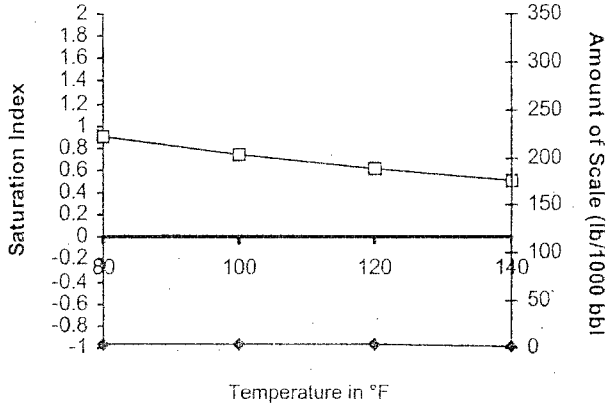
Scale Predictions from Baker Petrolite

Analysis of Sample 42410 @ 75 °F for EL PASO PRODUCTION, 08/01/07

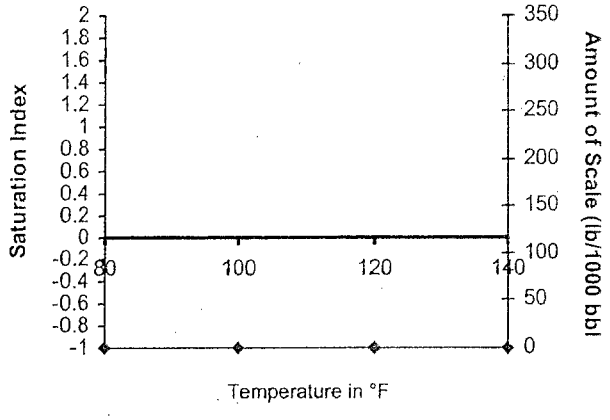
Calcite - CaCO3



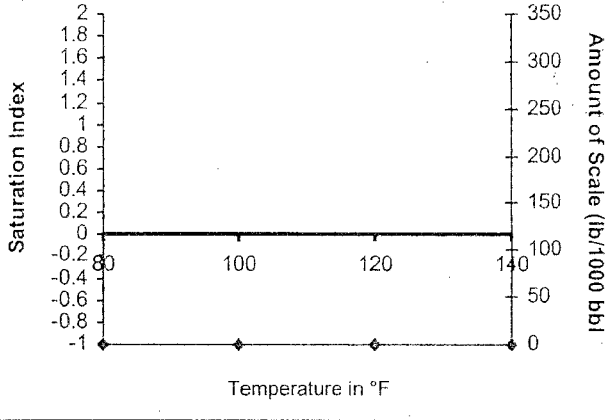
Barite - BaSO4



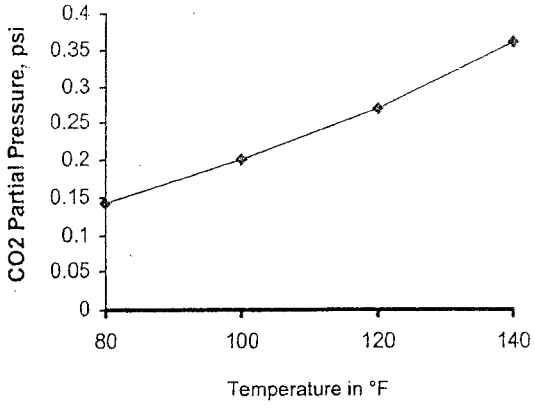
Gypsum - CaSO4*2H20



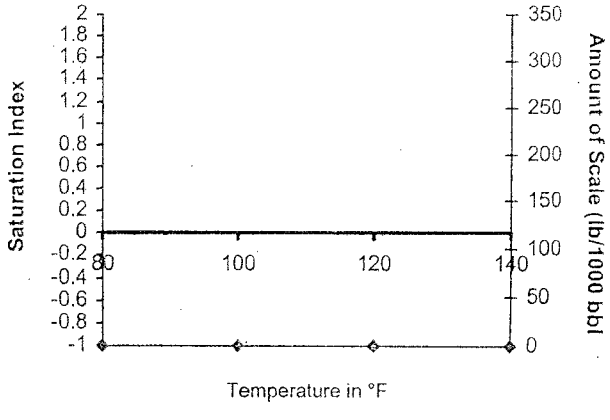
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Rocky Mountain Region
1675 Broadway, Suite 1500
Denver, CO 80202
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Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EL PASO PRODUCTION	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (505) 447-0621
Area:	RATON, NM	Sample #:	382505
Lease/Platform:	VERMEJO PARK RANCH 'A'	Analysis ID #:	77330
Entity (or well #):	319	Analysis Cost:	$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/13/07
Analysis Date:	11/19/07
Analyst:	KIMBERLY POOLE
TDS (mg/l or g/m3):	5231.6
Density (g/cm3, tonne/m3):	1.005
Anion/Cation Ratio:	1.0000000
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 382505 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**2040.0**	**57.54**	**Sodium:**	**1738.4**	**75.62**
Bicarbonate:	**1346.0**	**22.06**	**Magnesium:**	**7.0**	**0.58**
Carbonate:	**0.0**	**0.**	**Calcium:**	**43.0**	**2.15**
Sulfate:	**4.0**	**0.08**	**Strontium:**	**9.0**	**0.21**
Phosphate:			**Barium:**	**9.0**	**0.13**
Borate:			**Iron:**	**10.0**	**0.36**
Silicate:			Potassium:	25.0	0.64
			Aluminum:		
Hydrogen Sulfide:			Chromium:		
pH at time of sampling:			Copper:		
			Lead:		
pH at time of analysis:		7.93	Manganese:	0.200	0.01
pH used in Calculation:		**7.93**	Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.87	25.45	-3.65	0.00	-3.72	0.00	-2.57	0.00	0.53	1.74	0.2
100	0	0.94	27.55	-3.66	0.00	-3.67	0.00	-2.55	0.00	0.39	1.39	0.3
120	0	1.00	29.64	-3.67	0.00	-3.59	0.00	-2.52	0.00	0.27	1.05	0.44
140	0	1.07	31.03	-3.66	0.00	-3.50	0.00	-2.48	0.00	0.18	0.70	0.62

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

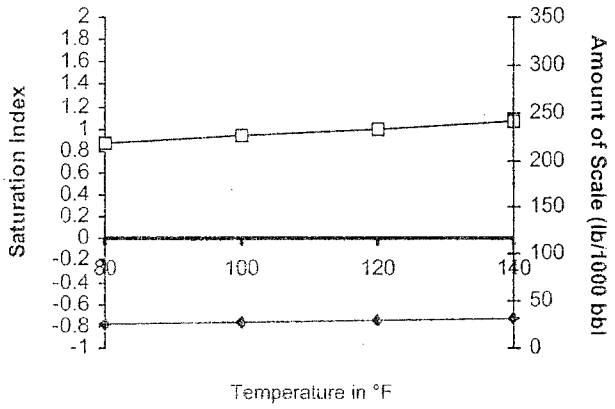
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

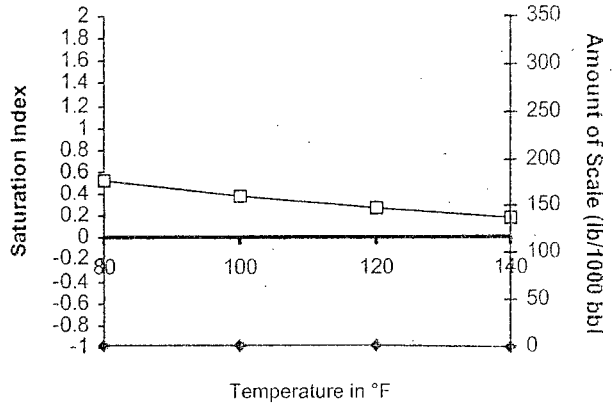
Scale Predictions from Baker Petrolite

Analysis of Sample 382505 @ 75 °F for EL PASO PRODUCTION, 11/19/07

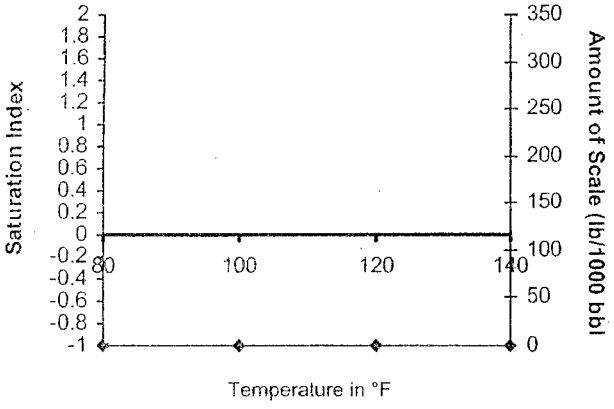
Calcite - CaCO3



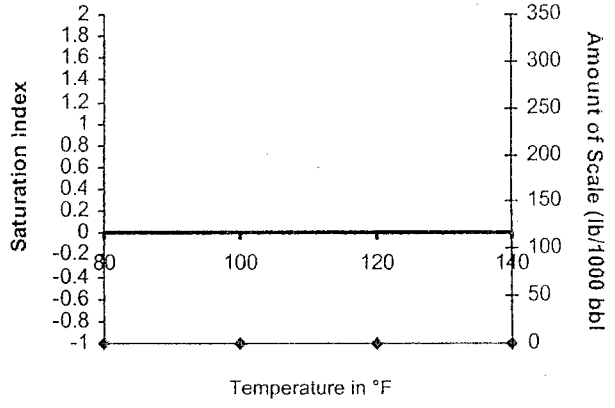
Barite - BaSO4



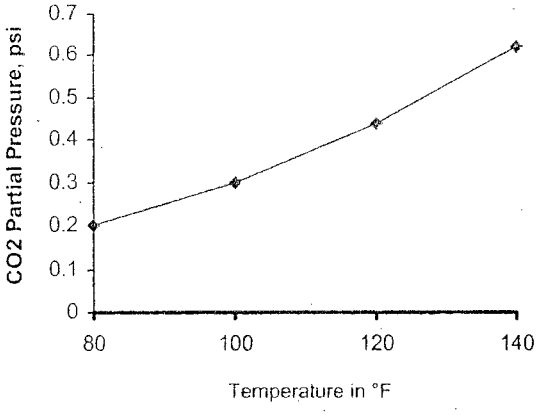
Gypsum - CaSO4*2H20



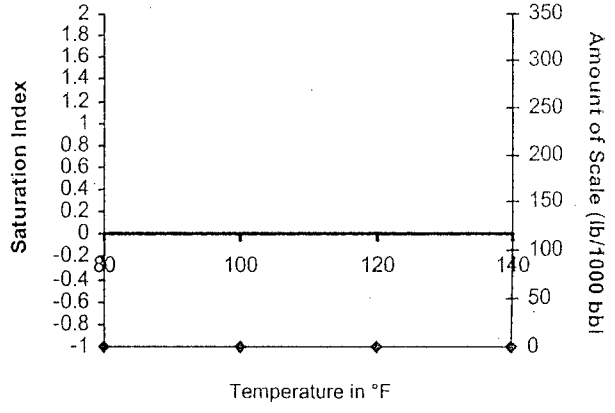
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



District I
625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
El Paso Energy Raton, L.L.C. **P.O. Box 190 Raton, New Mexico 87740**	**180514**
	[3] API Number 30-007-20892

[5] Property Code	[5] Property Name	[6] Well No.
24648	**Vermejo Park Ranch**	**VPR A 500**

[9] Proposed Pool 1	[10] Proposed Pool 2
Glorieta	**Entrada**

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	**31**	**31N**	**21E**	**O**	**338**	**South**	**2578**	**East**	**Colfax**

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	**S**	**Air/Rotary**	**P**	**7,966'**
[16] Multiple	[17] Proposed Depth	[18] Formation	[19] Contractor	[20] Spud Date
No	**7,122**	**Glorieta**	**Patterson Rig 744**	**January 2, 2008**

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water

Pit: Liner: Synthetic ☐ ____mils thick Clay ☐ Pit Volume:____bbls Drilling Method:

Closed-Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 ½"	**13 3/8"**	**48#**	**350'**	**230 sks**	**Surface**
12 ¼"	**9 5/8"**	**40#**	**3,970'**	**580 sks**	**Surface**
8 3/4"	**7"**	**26#**	**7,122'**	**880 sks**	**Surface**

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

1. Drill 17 1/2" surface hole to 350". Set 13 3/8", 48 ppf, H-40 STC casing. Cement to surface with 230 sks cement.
2. Drill 12 ¼" hole to approximately 3,970'. Set 9 5/8", 40 ppf, J-55 LTC casing. Cement with 580 sks cement.
   A cement bond log will be run if unable to circulate cement to surface.
3. Drill 8 ¾" hole to the Glorieta, at approximately 7,122 MD. Set 7", 26 ppf, P-110 LTC casing. Cement with 880 sks cement.
   A cement bond log will be run if unable to circulate cement to surface.
   Open hole logs to include induction, resistivity, caliper, density and gamma ray.
4. Perforate the Glorieta formation and attempt to catch native formation water sample.
5. Perforate and stimulate the Glorieta interval.
6. Conduct mechanical integrity test.
7. Restoration of surface location/site.

NOTIFY OCD CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Printed name: **David Veltri** DV

Title: **Production Manager**

E-mail Address: **david.veltri@elpaso.com**

Date: **11/30/2007** Phone: **(575) 445-6721**

OIL CONSERVATION DIVISION

Approved by: Ed Martin

Title: DISTRICT SUPERVISOR

Approval Date: 12/6/07 Expiration Date: 12/6/08

Conditions of Approval Attached ☐ SEE ABOVE

Inactive Well List

Total Well Count: 768 Inactive Well Count: 0 Since: 10/23/2006

Printed On: Wednesday, January 16 2008

District	API	Well	ULSTR	OCD Unit	OGRID	Operator	Lease Type	Well Type	Last Production	Formation/Notes	Status	TA Exp Date

WHERE Ogrid:180514, County:All, District:All, Township:All, Range:All, Section:All, Production(months):15, Excludes Wells Under ACOI, Excludes Wells in Approved TA Period