103-10404

UNDERGROUND INJECTION CONTROL

PERMIT APPLICATION

Yellow Creek Federal 4-16-1
API 05-103-10404
798' FSL & 689' FWL
SEC. 4, T1S, R98W
Rio Blanco County, Colorado
Lease # COC-59393

February 26, 2009

Prepared for:

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

Prepared by:

BUYS & ASSOCIATES, INC.
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Littleton, Colorado 80122
(303) 781-8211
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Yellow Creek Federal 4-16-1
API 05-103-10404

LIST OF ATTACHMENTS

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SUMMARY DOCUMENT
UIC WELL APPLICATION
Yellow Creek Federal 4-16-1
798' FSL & 689' FWL
SEC. 4, T1S, R98W
Rio Blanco County, Colorado
Lease # COC-59393

The following document contains information provided in support of BOPCO, L.P.'s (BOPCO) application for the conversion of the Yellow Creek Federal (YCF) 4-16-1 well into an injection well into the Sego formation in the Yellow Creek Field in Rio Blanco County, Colorado. The Yellow Creek Field is unitized and is managed by the White River Field office of the BLM.

(1) BOPCO is the operator and major working interest owner of wells located in the Yellow Creek Field, Rio Blanco County, Colorado. BOPCO's business address is provided below:

BOPCO L.P.
Trent Green
9949 S. Oswego St. Suite 200
Parker, Colorado 80134

(2) Enclosed as Attachment No. 1 (Area Map) is an area map containing the Yellow Creek Federal 4-16-1.

(3) Attachment No. 2 is a site map that shows the location of the proposed UIC well. This plat shows a circle of one-half mile radius centered on the YCF 4-16-1. The 1/2 mile radius encompasses the area of the review (AOR), within which BOPCO is required to investigate all wells for mechanical integrity.

The 1/2 mile radius also identifies those lands and leases and the owners thereof, which must be provided notice of this application.

There are two wells located within the AOR. These wells are the YCF 4-16-1 and the YCF 4-24-1. Intermediate casing has been set on the YCF 4-24-1. However drilling to total depth and completion operations are still pending.

(4) BOPCO proposes to utilize the YCF 4-16-1 as an injection well for disposal of produced water from the BOPCO wells producing in the Yellow Creek Field.

(5) The proposed injection/water disposal zone in the BOPCO YCFl 4-16-1 well comprises the existing open perforations in the well. These perforations in the basalmost Corcoran, Upper Sego and Lower Sego formations were originally intended for gas production. Unfortunately, the completion attempt proved sub-economic due to the production of excessive formation water. These sandstone bodies are characterized by fair to good lateral continuity, 8 to 10% porosity, and a range of 0.005 to 0.10 millidarcy average pre-frac permeability. Total effective permeability is estimated at 1.4 md. These sandstones are

interpreted as being deposited in a marine to marginal marine setting, with increasing tidal influence upward within the section.

The upper confining beds to the proposed injection zone consist of interbedded, tightly cemented sandstone, siltstone and shale. This interval is 40' and greater in thickness in the YCF 4-16-1 well (10,560'-10,600' MD), and in excess of 60' thick in the two offset wells (see Attachment No. 4, the Sego cross-section). The lower confining beds comprises the basal siltstone and shale of the Lower Sego, that grades downward into the Mancos Shale, a unit that is several thousand feet thick in this portion of the Piceance Basin. The top of this thick confining layer in the 4-16-1 well occurs at 11,050' MD.

There are no nearby Underground Sources of Drinking Water at this depth.

Attachment No. 3 is a structure map showing the Yellow Creek Federal 4-16-1 well.

(6) Completion Procedure – BOPCO recently filed a recompletion plan with the BLM. A retrievable bridge plug (RBP) was set at about 6,375'. Two intervals in the upper and lower Sego were perforated and acidized. Water samples were taken prior to acidizing and analyzed.

The injection intervals for the upper Sego intervals are:
10,616' – 10,758' 27 holes

The injection zones for the lower Sego intervals are:
10,950' – 10,992' 15 holes

BOPCO proposes to inject into both the upper and lower Sego intervals.

(7) Enclosed as Attachment No. 5 are standard analyses of produced water from 9 wells currently producing in this area. The Total Dissolved Solids (TDS) concentrations in these wells range from a low value of 11,477 mg/L to a high value of 39,900 mg/L.

A water sample taken from the Sego formation in the proposed injection well YCF 4-16-1 indicates TDS in the receiving water has a value of 10,800 mg/L.

(8) Completion data of the YCF 4-16-1 and current casing conditions of the YCF 4-24-1) are provided in Attachment No. 6.

(9) A copy of an Advanced Cement Evaluation log is contained in Attachment No. 7.

(10) A copy of a Chi Processed Triple Combo log is contained in Attachment No. 8.

(11) All surface and mineral owners and operators within ½ mile are identified in Attachment No. 9.

All the owners listed have been sent this permit application. The Affidavit of Notification is

also included in Attachment No. 9.

(12) The fracture gradient is for the 4-16-1 is 0.65 which corresponds to a maximum surface pressure of 2,225 psi standard temperature and pressure (STP). The maximum injection rate is 7500 barrels of water per day (BWPD).

(13) The proposed injection program is included in Attachment No.10a, wellbore diagrams for the injection setup are included in Attachment No. 10b, and a diagram showing the surface configuration is included in Attachment No. 10c

(14) The plugged and abandonment (P&A) procedure for this well is contained in Attachment No. 11.

(15) BOPCO will conduct a mechanical integrity test (MIT) test, a step rate test and a static bottom-hole pressure test. An MIT procedure is contained in Attachment No. 12. The conversion work will be satisfactory completed and submitted to COGCC for approval.

(16) BOPCO will re-complete and operate this well under their Colorado bond number COB000050.

(17) BOPCO will install various gauges on the well so that the injection pressure and tubing/ casing annulus pressure can be monitored. The well will be equipped with a flow meter with a cumulative volume recorder.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

01 12-22-1987;101STAT1330;30USC181 ET SE
Case Type 311121: O&G LSE NONCOMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres	Serial Number
2,539.810	COC--- - 059393

Serial Number: COC--- - 059393

Name & Address			Int Rel	% Interest
CTV O&G CO LLC	201 MAIN ST STE 2700	FORT WORTH TX 76102	LESSEE	25.000000000
KEYSTONE O&G CO LLC	201 MAIN ST STE 2700	FORT WORTH TX 76102	LESSEE	18.750000000
LMBI O&G CO LLC	201 MAIN ST STE 2700	FORT WORTH TX 76102	LESSEE	18.750000000
SRBI O&G CO LLC	201 MAIN ST STE 2700	FORT WORTH TX 76102	LESSEE	18.750000000
THRU LINE O&G CO LLC	201 MAIN ST STE 2700	FORT WORTH TX 76102	LESSEE	18.750000000

Serial Number: COC--- - 059393

Mer Twp Rng Sec	STyp	SNr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
06 0010S 0970W 006	ALIQ		S2NE,SENW;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0970W 006	LOT		5,8-11;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0970W 008	ALIQ		NENE,SWNE,NESE,SWSE;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 003	ALIQ		S2N2,S2;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 003	LOT		5-8;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 004	ALIQ		S2N2,S2;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 004	LOT		5-8;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 010	ALIQ		NENE;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT

Serial Number: COC--- - 059393

Act Date	Code	Action	Action Remarks	Pending Office
04/12/1996	124	APLN RECD	#0900;	
04/12/1996	128	PRESALE OFFER		
06/24/1996	896	CONFLICT IDENTIFIED	COC59631,COC59633;	
08/22/1996	237	LEASE ISSUED		
08/22/1996	897	CONFLICT RESOLVED	COC59631,59633 CLSD;	
08/22/1996	974	AUTOMATED RECORD VERIF	JLR	
09/01/1996	496	FUND CODE	05;145003	
09/01/1996	530	RLTY RATE - 12 1/2%		
09/01/1996	868	EFFECTIVE DATE		
09/19/1996	084	RENTAL RECEIVED BY MMS	$3810.00;11	
07/30/1997	084	RENTAL RECEIVED BY MMS	$3810.00;21/000000001	
11/20/1997	140	ASGN FILED		
12/09/1997	139	ASGN APPROVED	EFF 12/01/97;	
08/03/1998	084	RENTAL RECEIVED BY MMS	$3810.00;21/000000007	
08/02/1999	084	RENTAL RECEIVED BY MMS	$3,810.00;21/00000000	
08/03/2000	084	RENTAL RECEIVED BY MMS	$3810;21/80	
08/03/2001	084	RENTAL RECEIVED BY MMS	$5080;21/84	
09/03/2003	575	APD FILED	3-2,NWNW,S3;	
11/24/2003	575	APD FILED	3-1,NESE, SEC 3;	
12/09/2003	575	APD FILED	4-1,SWSW,SEC 4;	
01/02/2004	576	APD APPROVED	3-1,NM2204,BASS ENT;	
03/08/2004	576	APD APPROVED	4-1,NM2204,BASS ENT;	
07/01/2004	650	HELD BY PROD - ACTUAL	/1/	

01 12-22-1987;101STAT1330;30USC181 ET SE | **Total Acres** | **Serial Number**
Case Type 311121: O&G LSE NONCOMP PD -1987 | **2,539.810** | **COC--- - 059393**
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

10/20/2004	643	PRODUCTION DETERMINATION	/1/
10/20/2004	658	MEMO OF 1ST PROD-ACTUAL	/1/ 3-2,NWNW,S3;
11/14/2005	940	NAME CHANGE RECOGNIZED	THRULINEI/THRULINELP;
11/15/2005	940	NAME CHANGE RECOGNIZED	SIDBQASSINC/SRBILP;
11/16/2005	940	NAME CHANGE RECOGNIZED	LEEBASSINC/LMBILP;
11/17/2005	817	MERGER RECOGNIZED	KEYSTONE/KEYSTONEGPI;
12/02/2005	940	NAME CHANGE RECOGNIZED	KEYSTONE/KEYSTONEGP;
03/03/2006	140	ASGN FILED	1
03/03/2006	140	ASGN FILED	2
03/03/2006	140	ASGN FILED	3
03/03/2006	140	ASGN FILED	4
03/03/2006	140	ASGN FILED	5
04/13/2006	139	ASGN APPROVED	1 EFF 04/01/06;
04/13/2006	139	ASGN APPROVED	2 EFF 4/01/06;
04/13/2006	139	ASGN APPROVED	3 EFF 04/01/06;
04/13/2006	139	ASGN APPROVED	4 EFF 04/01/06;
04/13/2006	139	ASGN APPROVED	5 EFF 04/01/06;
05/07/2007	233	LEASE IN UNIT/UNCOMMIT'D	COC71142X;N PICEANCE
07/02/2007	575	APD FILED	11-41-1,NENE,11;
09/19/2007	575	APD FILED	03-11-0314;NWNW,3;
09/19/2007	575	APD FILED	03-11-0334;NWNW,3;
09/19/2007	575	APD FILED	03-11-0342;NWNW,3;
09/19/2007	575	APD FILED	03-11-0346;NWNW,3;
09/19/2007	575	APD FILED	03-11-0482;NWNW,3;
02/07/2008	575	APD FILED	3-42-1;NENE,3;
02/07/2008	575	APD FILED	4-11-1;NWNW,4;
02/07/2008	575	APD FILED	4-24-1;SENW,4;
02/07/2008	575	APD FILED	4-32-1;NWNE,4;
02/07/2008	575	APD FILED	4-44-1;SENE,4;
03/18/2008	576	APD APPROVED	03-11-0314,COB000050;
03/18/2008	576	APD APPROVED	03-11-0334,COB000050;
03/18/2008	576	APD APPROVED	03-11-0342,COB000050;
03/18/2008	576	APD APPROVED	03-11-0482,COB000050;
03/21/2008	940	NAME CHANGE RECOGNIZED	BEPCO OP CO/BOPCOLP;
07/01/2008	232	LEASE COMMITTED TO UNIT	COC68957X;YELLOWCRK
07/01/2008	657	EXT BY PROD (YATES DEC)	ORIG EFF 02/25/06;/A/
07/01/2008	690	AGRMT VALIDATED	ORIG EFF 09/08/05 /A/
07/01/2008	700	LEASE SEGREGATED	TO BE SEGR
08/18/2008	576	APD APPROVED	11-41-1,COB000050
08/18/2008	576	APD APPROVED	4-44-1,COB00050;
09/19/2008	575	APD FILED	3-32-1,SWNE,3;
11/20/2008	140	ASGN FILED	1 FLUID MINERALS

Line Nr **Remarks** **Serial Number: COC--- - 059393**

0001	/A/ LEASE COMMITTED TO YELLOW CREEK UNIT COC68957X
0002	EFF 7-1-08 WITH THE EXPANSION. THE ORIG UNIT

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

01 12-22-1987;101STAT1330;30USC181 ET SE
Case Type 311121: O&G LSE NONCOMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres	Serial Number
2,539.810	COC--- - 059393

0003 VALIDATION WAS 9/8/05, THE ORIG YATES WAS 2-25-06

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

01 12-22-1987;101STAT1330;30USC181 ET SE
Case Type 312021: O&G LSE COMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres	Serial Number
561.010	COC--- - 063730

Serial Number: COC--- - 063730

Name & Address			Int Rel	% Interest
ENCANA OIL & GAS (USA) INC	370 17TH ST #1700	DENVER CO 80202	LESSEE	100.000000000

Serial Number: COC--- - 063730

Mer Twp Rng Sec	STyp	SNr	Suff	Subdivision	District/Resource Area	County	Mgmt Agency
06 0010S 0980W 006	LOTS	23;			CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 007	ALIQ	E2NE,NESE;			CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 007	LOTS	2,3;			CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 008	ALIQ	W2NE,NW,N2SW;			CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT

Serial Number: COC--- - 063730

Act Date	Code	Action	Action Remarks	Pending Office
04/27/2000	387	CASE ESTABLISHED	PARCEL COC63730;	
05/11/2000	191	SALE HELD		
05/11/2000	267	BID RECEIVED	$14050.00;$25/AC	
05/12/2000	143	BONUS BID PAYMENT RECD	$1124.00;MIN	
05/23/2000	143	BONUS BID PAYMENT RECD	$12926.00;BAL	
05/30/2000	237	LEASE ISSUED		
05/31/2000	974	AUTOMATED RECORD VERIF	MM/JS	
06/01/2000	496	FUND CODE	05;145003	
06/01/2000	530	RLTY RATE - 12 1/2%		
06/01/2000	868	EFFECTIVE DATE		
06/23/2000	084	RENTAL RECEIVED BY MMS	$843.00;11/MULTIPLE	
05/23/2001	084	RENTAL RECEIVED BY MMS	$843.00;21/10088	
02/11/2002	940	NAME CHANGE RECOGNIZED	COASTAL CORP/ELPASO	
06/17/2002	140	ASGN FILED	1	
08/01/2002	139	ASGN APPROVED	EFF 07/01/02;	
08/20/2004	940	NAME CHANGE RECOGNIZED	MCMOC/MCMUROIL LLC;	
01/31/2005	817	MERGER RECOGNIZED	MCMUR/ECOGUSAINC;	
05/31/2010	763	EXPIRES		

Serial Number: COC--- - 063730

Line Nr	Remarks

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

01 12-22-1987;101STAT1330;30USC181 ET SE
Case Type 312021: O&G LSE COMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres	Serial Number
888.700	COC--- - 066735

Serial Number: COC--- - 066735

Name & Address			Int Rel	% Interest
BOPCO LP	201 MAIN ST STE 3100	FORT WORTH TX 76102	LESSEE	100.000000000

Serial Number: COC--- - 066735

Mer Twp Rng Sec	STyp	SNr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
06 0010S 0980W 005	ALIQ		S2N2,S2;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 005	LOT		5-8;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT

Serial Number: COC--- - 066735

Act Date	Code	Action	Action Remarks	Pending Office
03/24/2003	387	CASE ESTABLISHED	PARCEL COC66735;	
05/08/2003	191	SALE HELD		
05/08/2003	267	BID RECEIVED	$10668;$12/AC	
05/09/2003	143	BONUS BID PAYMENT RECD	$10666;	
05/19/2003	237	LEASE ISSUED		
05/19/2003	974	AUTOMATED RECORD VERIF	DLK	
06/01/2003	496	FUND CODE	05;145003	
06/01/2003	530	RLTY RATE - 12 1/2%		
06/01/2003	868	EFFECTIVE DATE		
01/17/2006	140	ASGN FILED	1	
02/15/2006	139	ASGN APPROVED	EFF 02/01/06;	
01/08/2007	940	NAME CHANGE RECOGNIZED	BEPCOLP/BOPCOLP;	
04/02/2008	650	HELD BY PROD - ACTUAL	VER,06/02/08,WRFO	
04/02/2008	658	MEMO OF 1ST PROD-ACTUAL	/1/ #5-32-1,SWNE,5;	
06/02/2008	643	PRODUCTION DETERMINATION	/1/	
07/01/2008	657	EXT BY PROD (YATES DEC)	ORIG EFF 09/08/05;/A/	
07/01/2008	690	AGRMT VALIDATED	ORIG EFF 02/25/06;/A/	
10/15/2008	232	LEASE COMMITTED TO UNIT	COC66735X;YELLOWCK	

Serial Number: COC--- - 066735

Line Nr	Remarks
0001	/A/LEASE COMMITTED TO YELLOW CREEK UNIT COC66957X
0002	EFF 7/1/08 WITH THE EXPANSION. THE ORIG UNIT
0003	VALIDATION WAS 9/8/05, THE ORIG YATES WAS 2/25/06

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

01 12-22-1987;101STAT1330;30USC181 ET SE
Case Type 311121: O&G LSE NONCOMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres	Serial Number
2,582.810	COC--- - 070221

Serial Number: COC--- - 070221

Name & Address			Int Rel	% Interest
EXXON MOBIL CORP	PO BOX 4358	HOUSTON TX 772524358	LESSEE	100.000000000

Serial Number: COC--- - 070221

Mer Twp Rng Sec	STyp	SNr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
06 0010S 0980W 008	ALIQ		E2NE,S2S2,N2SE;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 009	ALIQ		N2N2,S2NW,S2;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 010	ALIQ		SWSW,SESE;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 010	ALIQ		NWNE,N2NW,N2SW;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 013	LOT		9-24;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 014	LOT		16-23;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT
06 0010S 0980W 015	LOT		1-13;	CRAIG WHITE RIVER	RIO BLANCO	BUREAU OF LAND MGMT

Serial Number: COC--- - 070221

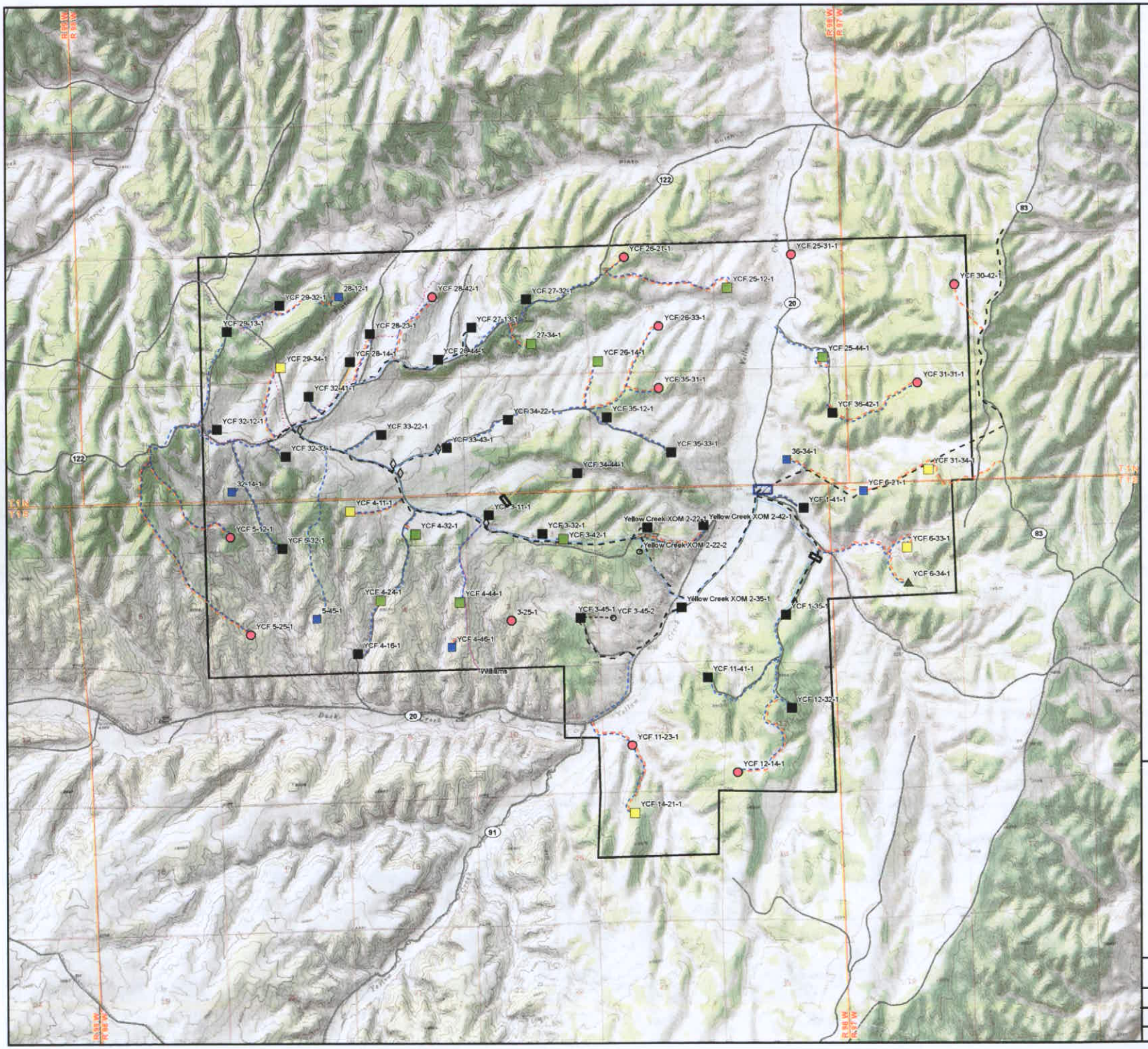
Act Date	Code	Action	Action Remarks	Pending Office
08/27/1997	124	APLN RECD		
05/31/1998	237	LEASE ISSUED		
06/01/1998	496	FUND CODE	05;145003	
06/01/1998	530	RLTY RATE - 12 1/2%		
06/01/1998	868	EFFECTIVE DATE		
08/22/2004	940	NAME CHANGE RECOGNIZED	EXXON/EXXONMOBIL	
09/17/2004	209	CASE CREATED BY SEGR	OUT OF COC61065;	
07/23/2008	235	EXTENDED	THRU 05/31/10; DRLG	
05/31/2010	763	EXPIRES		

Line Nr Remarks

Serial Number: COC--- - 070221

ATTACHMENT NO. 1

AREA MAP


YCF 28-21-1
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28-12-1
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27-34-1
YCF 25-44-1
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YCF 32-41-1
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YCF 36-42-1
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YCF 35-33-1
36-34-1
YCF 31-34-1
YCF 34-44-1
32-14-1
YCF 6-21-1
YCF 4-11-1
YCF 3-11-1
YCF 1-41-1
YCF 5-12-1
YCF 4-32-1
YCF 3-32-1
Yellow Creek XOM 2-22-1
Yellow Creek XOM 2-42-1
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Yellow Creek XOM 2-22-2
YCF 6-33-1
YCF 6-34-1
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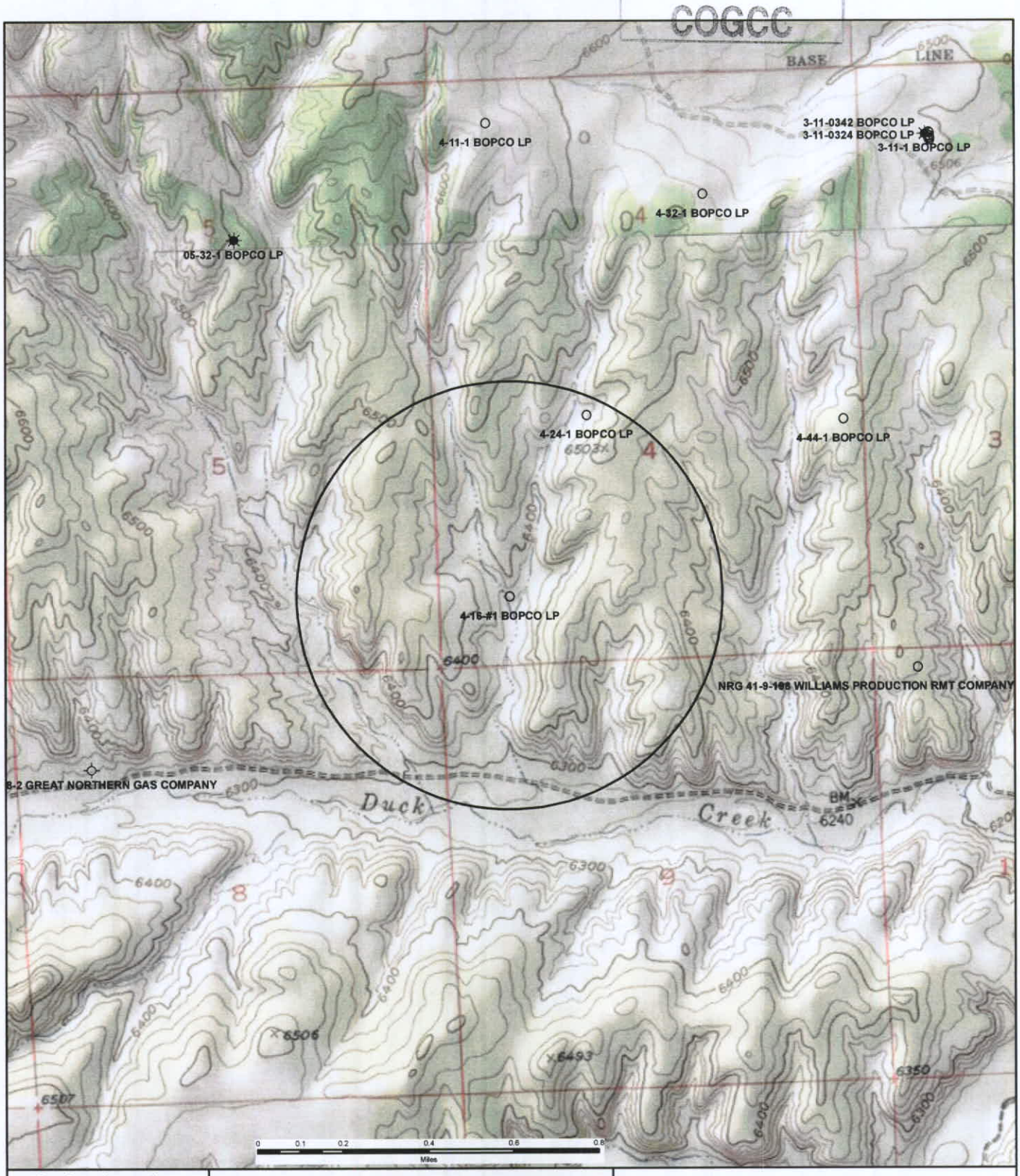
YCF 4-44-1
Yellow Creek XOM 2-35-1
5-45-1
3-25-1
YCF 3-45-1
YCF 3-45-2
YCF 1-35-1
YCF 5-25-1
YCF 4-46-1
YCF 4-16-1
Williams
YCF 11-41-1
YCF 12-32-1
YCF 11-23-1
YCF 12-14-1
YCF 14-21-1
Legend
Existing Well Pad
Directional Bottomhole
Directional Drilling Route
2008 Drilling Pad
2009 Drilling Pad
Beyond 2009 Drilling Pad
Un-Surveyed Proposed Pad
Drilling Time Frame Unknown
Existing Road
Proposed Road
Proposed Williams Road
Existing Pipeline
Proposed Pipeline
Gas Line
Water Line
Existing Williams Pipeline
Locked Gate
Pig Launcher/Catcher
Compressor Site
RECEIVED
MAR 05 2009
COGCC
N
0
0.5
1 Miles
Field Development Map
Rio Blanco County, Colorado
BOPCO, L.P.
Date: October 15, 2008
Buys & Associates, Inc.
Figure 1

ATTACHMENT NO. 2

RADIUS MAP OF
ADJACENT WELLS



Project Location

Legend

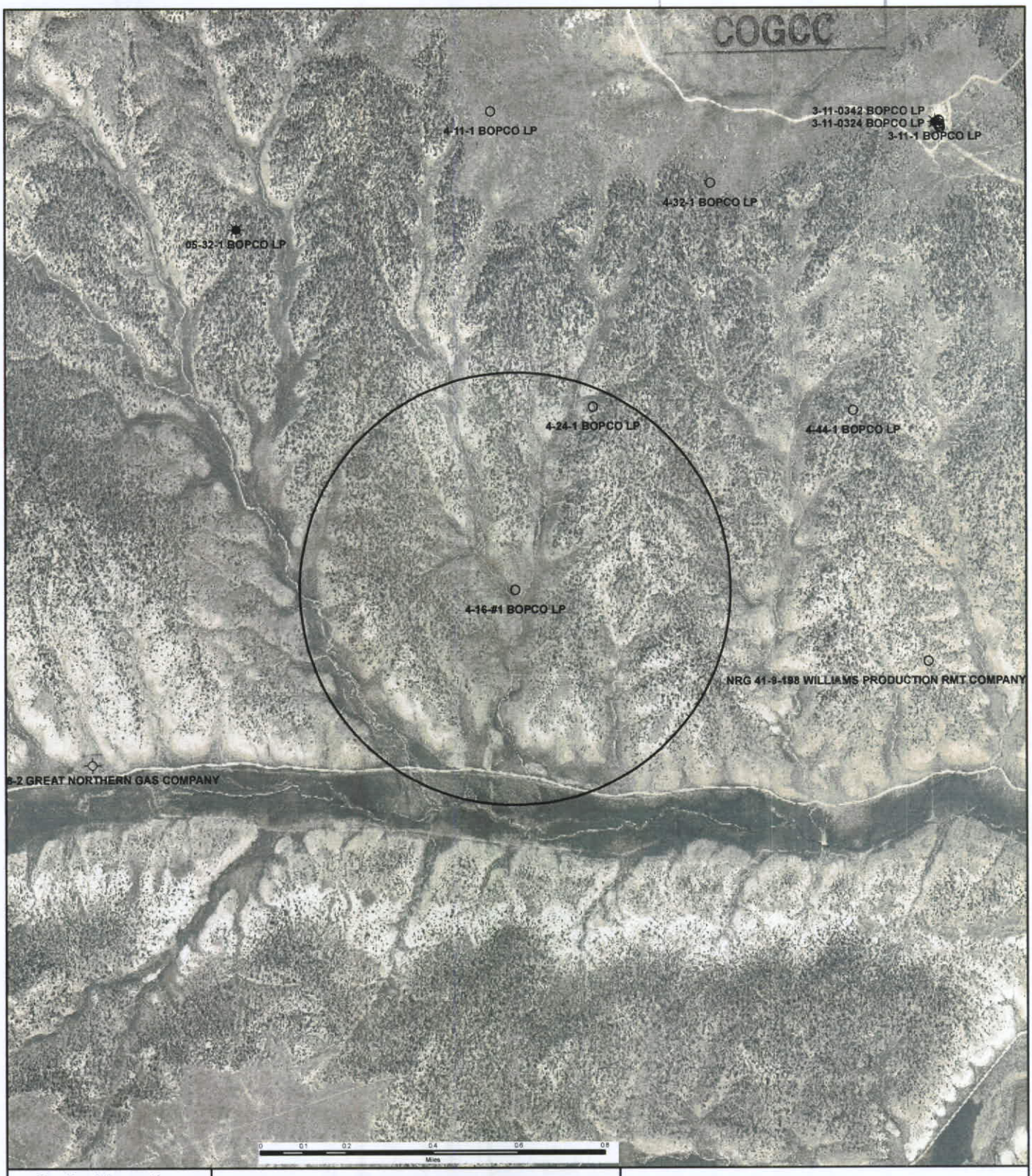
Well Locations
- Proposed Location
- Plugged & Abandoned
- Shut In
- Producing
- Dry & Abandoned

Half Mile Buffer

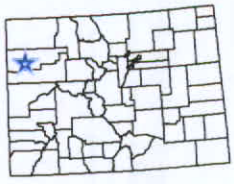
Buys & Associates, Inc.

BOPCO, L.P.

Yellow Creek Federal 4-16-1
Rio Blanco County, Colorado
January 2009



Project Location



Legend

Well Locations
Half Mile Buffer
Proposed Location
Plugged & Abandoned
Shut In
Producing
Dry & Abandoned

Buys & Associates, Inc.

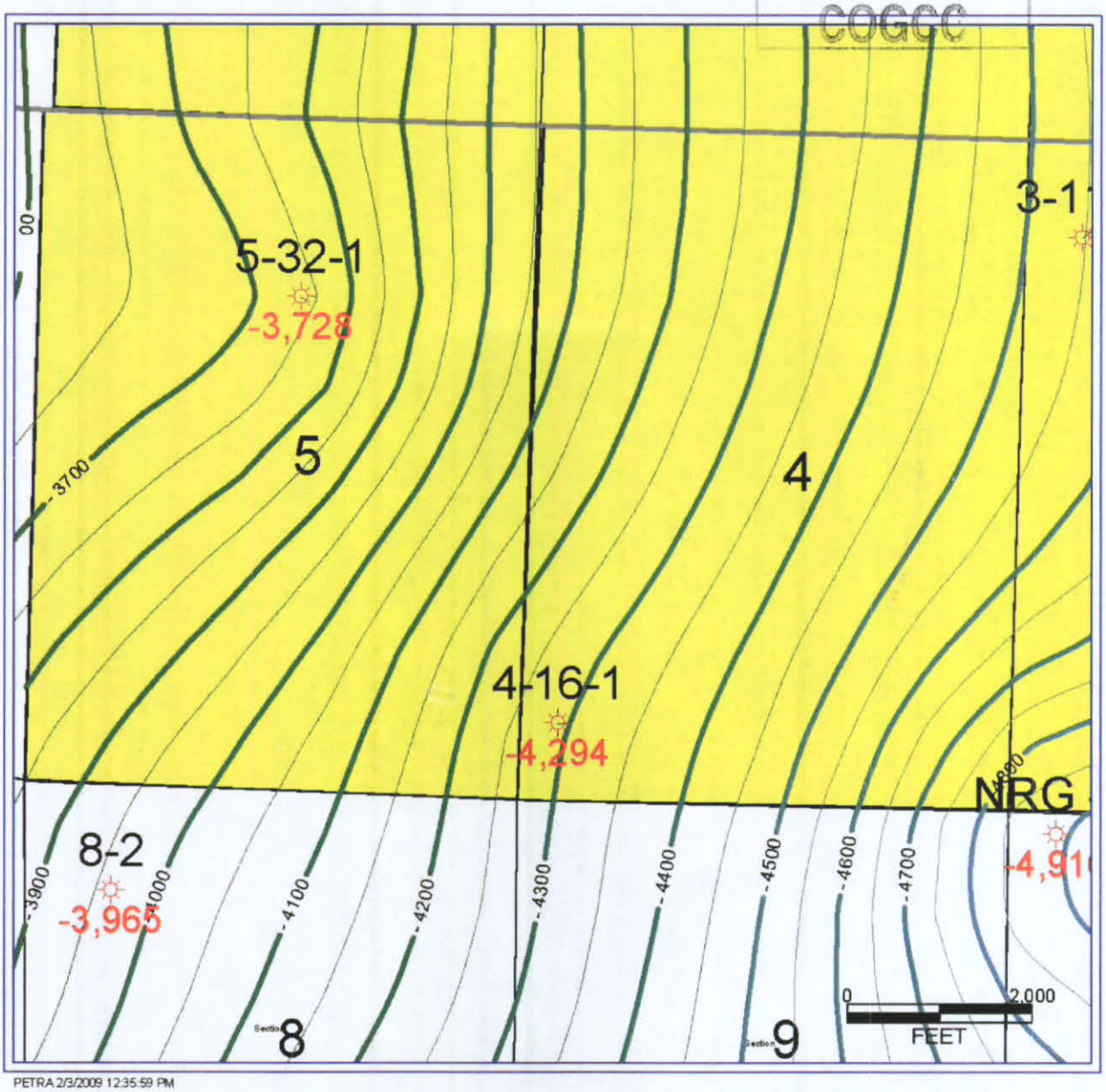
BOPCO, L.P.

Yellow Creek Federal 4-16-1
Rio Blanco County, Colorado
January 2009

Aerial Imagery from 2005

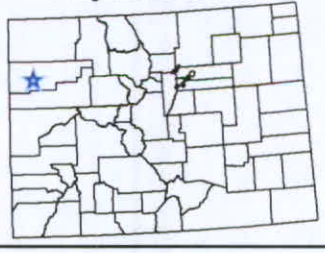
ATTACHMENT NO. 3

SEGO STRUCTURE MAP



PETRA 2/3/2009 12:35:59 PM

Project Location



BOPCO, L.P.

Yellow Creek Federal 4-16-1
Sego Structural Map
Rio Blanco County, Colorado

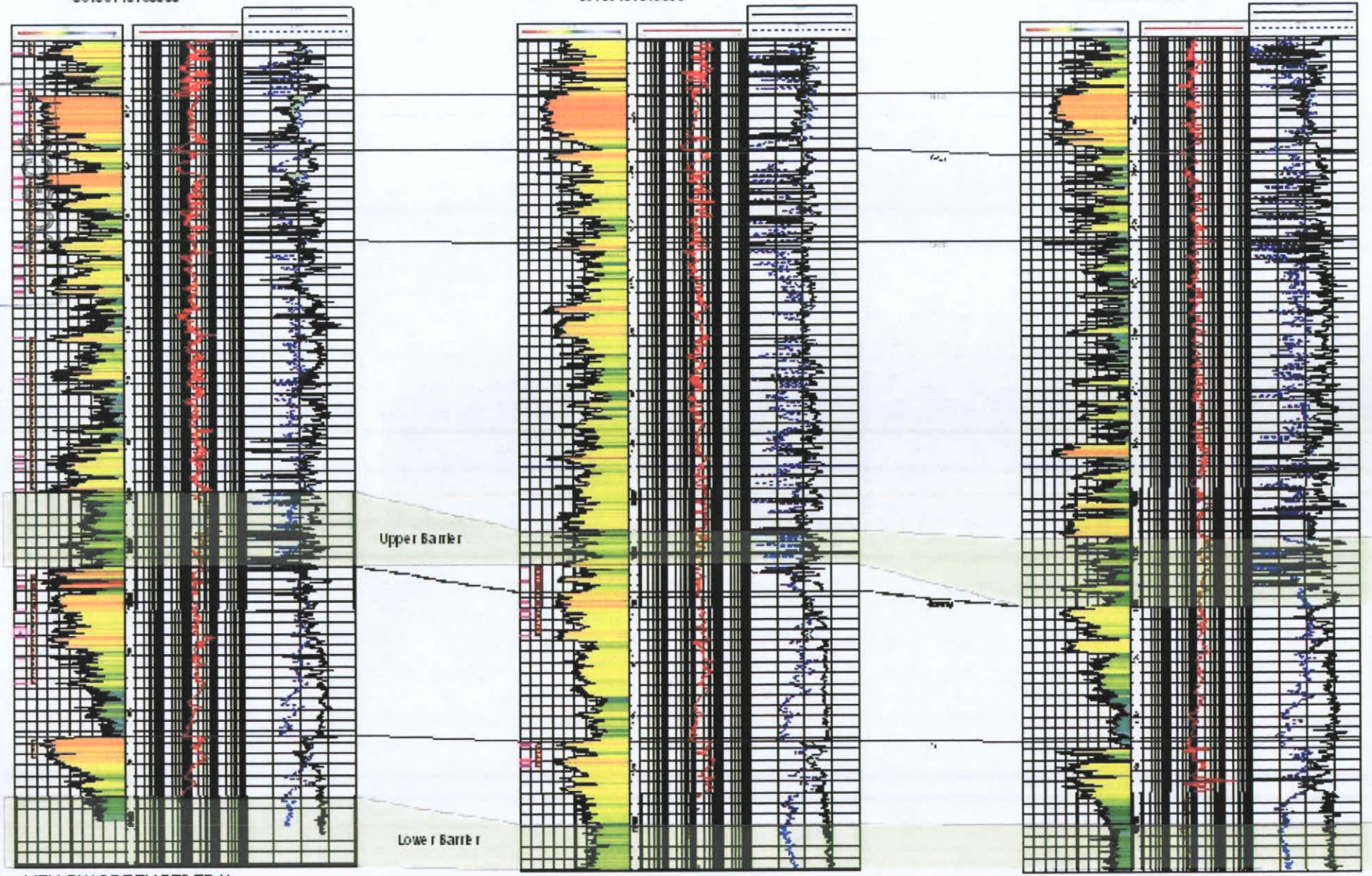
ATTACHMENT NO. 4

CROSS-SECTIONS OF THE INJECTION FORMATION

BOPCO LP
YELLOW CREEK FEDERAL
5-32-1
05103110130000

BOPCO
YELLOW CREEK FEDERAL
4-16-1
05103104040000

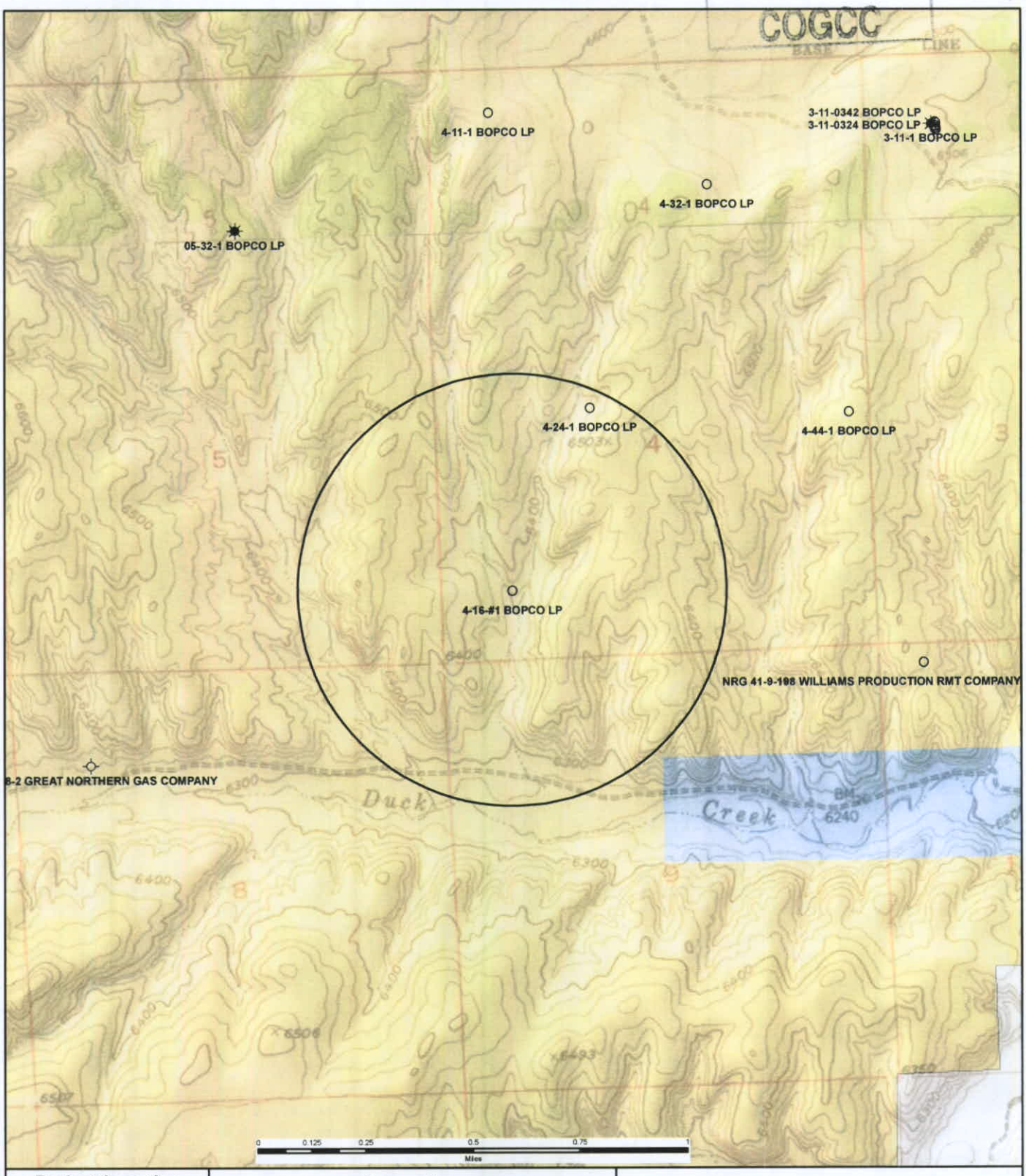
WILLIAMS PROD RMT CO
FEDERAL
NRG 41
05103110180000



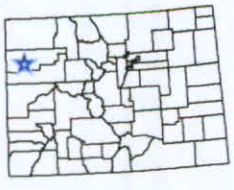
YELLOW CREEK FEDERAL
5-32-1

YELLOW CREEK FEDERAL
4-16-1

FEDERAL
NRG 41



Project Location



Legend

Well Locations
- Proposed Location
- Plugged & Abandoned
- Shut In
- Producing
- Dry & Abandoned

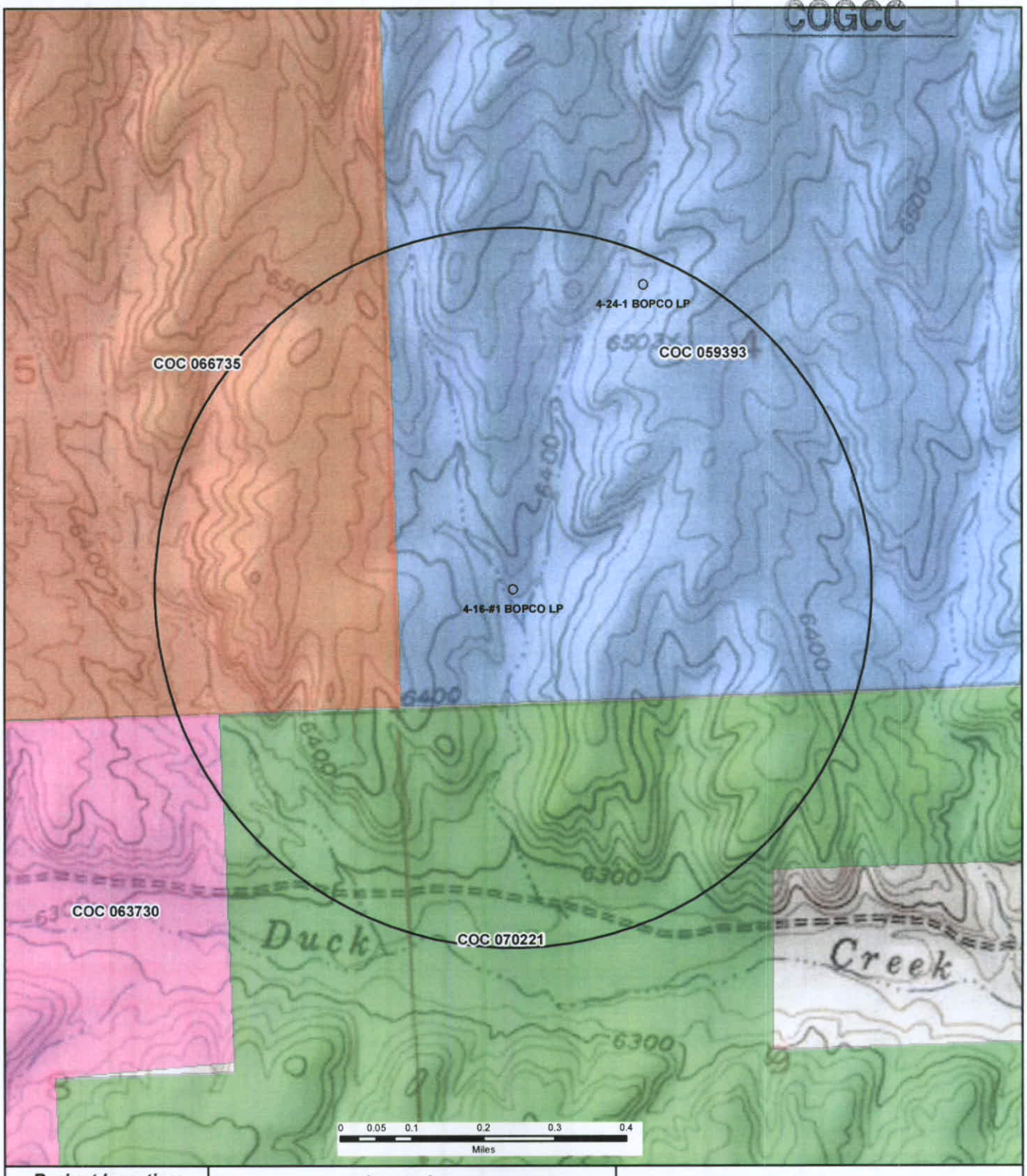
Half Mile Buffer

Land Ownership
- PVT
- COLORADO
- BLM

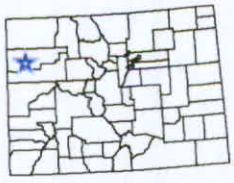
Buys & Associates, Inc.

BOPCO, L.P.

Yellow Creek Federal 4-16-1
Rio Blanco County, Colorado
January 2009



Project Location



Legend

Well Locations
- Proposed Location
- Plugged & Abandoned
- Shut In
- Producing
- Dry & Abandoned

Half Mile Buffer

LeaseBoundaries
- COC 059393 - BOPCO
- COC 063730 - EnCana
- COC 066735 - BOPCO
- COC 070221 - Exxon

Buys & Associates, Inc.

BOPCO, L.P.

Yellow Creek Federal 4-16-1
Rio Blanco County, Colorado
January 2009

ATTACHMENT NO. 5

WATER ANALYSIS

ENERGY LABORATORIES, INC. * 400 W Boxelder Rd * Gillette, WY 82718-5315
Toll Free 866.686.7175 * 307.686.7175 * FAX 307.682.4625 * gillette@energylab.com

LABORATORY ANALYTICAL REPORT

Client: BOPCO LC
Site Name: Yellow Creek Produced Water Quality
Project:
Client Sample ID: PW_4_16_1_Flowback (1,2)
Location:
Samp FRQ/Type: OT
Lab ID: G08110015-001

Report Date: 11/20/08
Collection Date: 10/28/08 13:10
DateReceived: 11/03/08
Sampled By: Garrett Elsener
Matrix: Aqueous
Tracking Number: 136078

Analyses	Result	Units	Result	Units	Qualifier	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Turbidity	37	NTU			H	A2130 B	11/03/08 15:19 / mav
MAJOR IONS, DISSOLVED							
Bicarbonate as HCO3	1610	mg/L	26.3	meq/L		A2320 B	11/04/08 11:20 / smr
Chloride	5260	mg/L	148.5	meq/L		E300.0	11/03/08 18:21 / mli
Fluoride	41.7	mg/L	2.19	meq/L		E300.0	11/03/08 19:00 / mli
Nitrogen, Nitrate as N	<0.1	mg/L	<0.007	meq/L		E300.0	11/03/08 19:00 / mli
Nitrogen, Nitrite as N	<0.1	mg/L	<0.007	meq/L		E300.0	11/03/08 19:00 / mli
Nitrogen, Nitrate+Nitrite as N	<0.1	mg/L	<0.007	meq/L		E300.0	11/03/08 19:00 / mli
Sulfate	102	mg/L	2.12	meq/L		E300.0	11/03/08 19:00 / mli
MAJOR IONS, TOTAL							
Calcium	75	mg/L	3.76	meq/L		SW6010B	11/10/08 16:05 / eli-b
Magnesium	10	mg/L	0.82	meq/L		SW6010B	11/10/08 16:05 / eli-b
Potassium	79	mg/L	2.02	meq/L		SW6010B	11/10/08 16:05 / eli-b
Sodium	4610	mg/L	200.5	meq/L		SW6010B	11/10/08 16:05 / eli-b
METALS, TOTAL							
Aluminum	0.3	mg/L				SW6020	11/08/08 00:14 / eli-b
Antimony	<0.005	mg/L				SW6020	11/08/08 00:14 / eli-b
Arsenic	<0.005	mg/L				SW6020	11/08/08 00:14 / eli-b
Barium	4.9	mg/L				SW6020	11/08/08 00:14 / eli-b
Beryllium	<0.001	mg/L				SW6020	11/08/08 00:14 / eli-b
Boron	26.6	mg/L				SW6020	11/08/08 00:14 / eli-b
Cadmium	<0.001	mg/L				SW6020	11/08/08 00:14 / eli-b
Chromium	0.02	mg/L				SW6020	11/10/08 14:27 / eli-b
Cobalt	<0.01	mg/L				SW6020	11/08/08 00:14 / eli-b
Copper	<0.01	mg/L				SW6020	11/08/08 00:14 / eli-b
Iron	26.5	mg/L				SW6010B	11/10/08 16:05 / eli-b
Lead	<0.01	mg/L				SW6020	11/08/08 00:14 / eli-b
Lithium	5.3	mg/L				SW6010B	11/10/08 16:05 / eli-b
Manganese	0.37	mg/L				SW6010B	11/10/08 16:05 / eli-b
Mercury	<0.001	mg/L				SW7470A	11/07/08 11:53 / eli-b
Nickel	<0.01	mg/L				SW6020	11/08/08 00:14 / eli-b
Phosphorus	2.0	mg/L				SW6010B	11/10/08 16:05 / eli-b
Selenium	<0.005	mg/L				SW6020	11/08/08 00:14 / eli-b
Silica	137	mg/L				SW6010B	11/13/08 15:41 / eli-b
Silicon	64.0	mg/L				SW6010B	11/13/08 15:41 / eli-b
Silver	<0.005	mg/L				SW6020	11/08/08 00:14 / eli-b
Strontium	10.2	mg/L				SW6020	11/08/08 00:14 / eli-b
Thallium	<0.005	mg/L				SW6020	11/08/08 00:14 / eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
H - Analysis performed past recommended holding time.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

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Project:
Client Sample ID: PW_4_16_1_Flowback (1,2)
Location:
Samp FRQ/Type: OT
Lab ID: G08110015-001

Report Date: 11/20/08
Collection Date: 10/28/08 13:10
DateReceived: 11/03/08
Sampled By: Garrett Elsener
Matrix: Aqueous
Tracking Number: 136078

Analyses	Result	Units	Result	Units	Qualifier	Method	Analysis Date / By
METALS, TOTAL							
Tin	<0.1	mg/L				SW6020	11/08/08 00:14 / eli-b
Vanadium	<0.1	mg/L				SW6020	11/08/08 00:14 / eli-b
Zinc	0.06	mg/L				SW6020	11/10/08 14:27 / eli-b
NON-METALS							
Alkalinity, Total as CaCO3	1320	mg/L				A2320 B	11/04/08 11:20 / smr
Cyanide, Total	<0.005	mg/L				Kelada mod	11/06/08 14:17 / eli-b
Organic Carbon, Total (TOC)	160	mg/L				A5310 B	11/12/08 15:26 / eli-c
pH	7.49	s.u.			H	A4500-H B	11/03/08 15:17 / mav
Solids, Total Dissolved TDS @ 180 C	10800	mg/L			H	A2540 C	11/06/08 10:07 / mli
Solids, Total Suspended TSS @ 105 C	10	mg/L			H	A2540 D	11/05/08 09:25 / mli
Sulfide	0.14	mg/L			H	A4500 S-D	11/05/08 09:30 / eli-b
Sulfite	<2	mg/L			H	E377.1	11/05/08 00:00 / eli-b
Oil & Grease (HEM)	10.8	mg/L				E1664A	11/06/08 13:11 / wet
NUTRIENTS							
Nitrogen, Ammonia as N	13.3	mg/L				E350.1	11/05/08 12:36 / eli-b
DEMAND							
Oxygen Demand, Biochemical (BOD)	640	mg/L			H	A5210 B	11/04/08 10:59 / mli
Oxygen Demand, Chemical (COD)	1200	mg/L				HACH 8000	11/06/08 17:22 / smr
DISSOLVED GAS							
Methane	0.640	mg/L				SW8015M	11/06/08 11:40 / eli-b
PETROLEUM HYDROCARBONS-VOLATILE							
Gasoline Range Organics (GRO)	9080	ug/L				SW8015B	11/08/08 16:17 / eli-b
Total Purgeable Hydrocarbons	11100	ug/L				SW8015B	11/08/08 16:17 / eli-b
Surr: Trifluorotoluene	112	%REC				SW8015B	11/08/08 16:17 / eli-b
- Note 1: Gasoline Range Organics(GRO) are defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.							
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
PETROLEUM HYDROCARBONS-SEMI-VOLATILE							
Diesel Range Organics (DRO)	38	mg/L				SW8015B	11/08/08 20:16 / eli-b
Total Extractable Hydrocarbons	53	mg/L				SW8015B	11/08/08 20:16 / eli-b
Surr: o-Terphenyl	50.0	%REC				SW8015B	11/08/08 20:16 / eli-b
- Note 1: Diesel Range Organics are defined as all hydrocarbons eluting between C10 and C28.							
- Note 2: Total Extractable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.							
VOLATILE ORGANIC COMPOUNDS							
Benzene	912	ug/L				SW8260B	11/11/08 12:28 / eli-b
Bromobenzene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Bromochloromethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b

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Sampled By: Garrett Elsener
Matrix: Aqueous
Tracking Number: 136078

Analyses	Result	Units	Result	Units	Qualifier	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Bromodichloromethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Bromoform	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Bromomethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Carbon tetrachloride	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Chlorobenzene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Chlorodibromomethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Chloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
2-Chloroethyl vinyl ether	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Chloroform	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Chloromethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,2-Dibromoethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
2-Chlorotoluene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
4-Chlorotoluene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Dibromomethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,2-Dichlorobenzene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,3-Dichlorobenzene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,4-Dichlorobenzene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Dichlorodifluoromethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1-Dichloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,2-Dichloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1-Dichloroethene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
cis-1,2-Dichloroethene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
trans-1,2-Dichloroethene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,2-Dichloropropane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,3-Dichloropropane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
2,2-Dichloropropane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1-Dichloropropene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
cis-1,3-Dichloropropene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
trans-1,3-Dichloropropene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Ethylbenzene	141	ug/L				SW8260B	11/11/08 12:28 / eli-b
Methyl ethyl ketone	<2000	ug/L				SW8260B	11/11/08 12:28 / eli-b
Methyl tert-butyl ether (MTBE)	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Methylene chloride	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Styrene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1,1,2-Tetrachloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1,2,2-Tetrachloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Tetrachloroethene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Toluene	1410	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1,1-Trichloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
1,1,2-Trichloroethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Trichloroethene	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Trichlorofluoromethane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b

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DateReceived: 11/03/08
Sampled By: Garrett Elsener
Matrix: Aqueous
Tracking Number: 136078

Analyses	Result	Units	Result	Units	Qualifier	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,2,3-Trichloropropane	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
Vinyl chloride	<100	ug/L				SW8260B	11/11/08 12:28 / eli-b
m+p-Xylenes	1020	ug/L				SW8260B	11/11/08 12:28 / eli-b
o-Xylene	416	ug/L				SW8260B	11/11/08 12:28 / eli-b
Xylenes, Total	1440	ug/L				SW8260B	11/11/08 12:28 / eli-b
Surr: Dibromofluoromethane	99.0	%REC				SW8260B	11/11/08 12:28 / eli-b
Surr: 1,2-Dichloroethane-d4	99.0	%REC				SW8260B	11/11/08 12:28 / eli-b
Surr: Toluene-d8	103	%REC				SW8260B	11/11/08 12:28 / eli-b
Surr: p-Bromofluorobenzene	108	%REC				SW8260B	11/11/08 12:28 / eli-b

- The sample was received in the laboratory with a pH > 2. The pH was 4. The reporting limit reflects a one hundred times dilution. The sample was diluted due to sample matrix and high analyte concentration.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

MULTICHEM

Water Analysis

Company: **Bass Petroleum**

Location	Date	PH	H2S	Iron	Mg	HC03	Chloride	Gravity	Ca	Index	lb/1000	So4	Index	lb/1000	Ba	Index	lb/1000	TDS
YC 34-44-1	8/11/2008	8.6	0	6.5	0.36	2,623	9,611	1.014	0	0	0	4	0	0	6.4	.11	0	19,205
YC 34-22-1	8/11/2008	8.7	10	28	0.72	2,989	8,874	1.121	80	75	109	57	0	0	2	0	0	18,712
YC 33-43-1	8/11/2008	9	4	5.9	0.39	2,562	9,968	1.014	0	0	0	6	0	0	22	0	0	19,841
YC 33-22-1	8/11/2008	9	4	11	0.44	3,050	7,411	1.013	0	0	0	34	0	0	0	0	0	16,313
YC 32-33-1	8/11/2008	8.9	0	4.5	0.66	1,525	11,841	1.016	240	121	91	5	0	0	23	0	0	21,188
YC 29-32-1	8/11/2008	8.7	4	18	0.53	2,074	11,477	1.015	160	105	133	26	0	0	6.6	0	0	11,477
YC 2-22-1	8/11/2008	8.9	4	4.2	0.39	3,050	7,204	1.013	80	0	0	0	0	0	4	0	0	15,914
YC 3-11-1	8/11/2008	8.7	5	3	0.36	3,477	8,466	1.013	0	0	0	0	0	0	2.9	0	0	18,495
YC 5-32-1	8/11/2008	8.8	0	3.5	0.38	1,891	8,861	1.011	0	0	0	0	0	0	3.6	0	0	16,889

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: 27-13-1
Client Project ID: 27-13
Date Collected: 6/26/08
Date Received: 7/11/08

Lab Work Order: 08-4928
Lab Sample ID: 08-4928-01
Sample Matrix: Water

TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C

Prep Method: LOWER WATER

Date Prepared: 7/14/08
Date Analyzed: 7/14/08

Lab File ID: 23
Method Blank: MBLK

Dilution Factor: 1
Lab Fraction ID: 08-4928-01B

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		39900 H	10.0	mg/L

Analyst

Approved

Qualifiers:
B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value.Value exceeds calibration range
H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 7/15/08

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Project ID	27-13	**Lab Order:**	08-4928
Date Received:	7/11/08	**Date Prepared:**	7/19/08
		Units:	mg/L

n-Hexane Extractable Material (Oil & Grease)

HEM - Oil & Grease

Method: E1664A **Prep Method:**

Lab ID	Client ID	Matrix	Date Collected	Date Analyzed	Results	LQL	DF
08-4928-01A	27-13-1	Water	6/26/08	7/19/08	494	15.4	3.077

Analyst

Approved

Qualifiers:
B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value.Value exceeds calibration range
H - Sample analysis exceeded analytical holding tim
J - Indicates an estimated value when the compound is detected, but is below the LQL
S - Spike Recovery outside accepted limits
U - Compound analyzed for but not detected
X - See case narrative
* -Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Definitions:
DF - Dilution Factor
PF - Prep Factor
LQL - Lower Quantitation Limit

Print Date: 7/22/2008

HALLIBURTON

HALLIBURTON ENERGY SERVICES
BRIGHTON DISTRIC LABORATORY
303-655-4709

Analysis of Water from Piccance Basin

TSR No. 767

August 7, 2008

Distribution

M. Barella
I. Paterniti

Summary

M. Barella submitted some water for analysis obtained from Piccance Basin,Rio Blanco City. The results are attached below.

Test Made By: _____
J. Hernandez

Approved By: _____
S. Lopez, Lab Manager

HALLIBURTON

Customer:
Formation: Piccanse Basin UPPER WASATCH
Lease: Rio Blanco City
Date:

Sample ID.	Composite Sample						
Temperature - F	71.7						
pH	5.53						
Chlorides, mg/L	>20,000						
Potassium, mg/L	>20,000						
Sodium, mg/L	n/a						
Sulfates, mg/L	400						
Iron, mg/L	312						
Bicarbonates, mg/L	244						
Carbonates, mg/L	n/a						
Reducing Agents	present						
Total Hardness, mg/L	interence						
Calcium, mg/L	interence						
Magnesium, mg/L	interence						
Phosphate, mg/L	0						
TDS, mg/L	63,400						
Resistivity, ohms/meter	0.12						
Specific Gravity, mg/L	1.05						

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Sonora, TX 76950

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Water Analysis Report

Production Company: **BASS OPERATING PROD**
Well Name: **YELLOW CREEK FED 2-22-1**
Sample Point: **Wellhead**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13292**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	158
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0130
pH:	8.9
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	15914
Molar Conductivity (µS/cm):	24111
Resitivity (Mohm):	0.4147

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	80.00	Chloride (Cl):	7204.00
Magnesium (Mg):	97.60	Sulfate (SO_4):	0.01
Barium (Ba):	4.33	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	3050.00
Sodium (Na):	5469.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	4.00
Iron (Fe):	4.24	Phosphate (PO_4):	-
Manganese (Mn):	0.39	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
158	*0*	*97.59*	*103.22*	*0.00*	*-2165.90*	*0.00*	*-1973.00*	-	-	*0.00*	*-20.49*	*0.05*
80	0	77.06	123.66	0.00	180.34	0.00	-3030.60	-	-	0.00	-8.32	0.04
100	0	88.81	113.37	0.00	175.99	0.00	-2855.20	-	-	0.00	-10.81	0.04
120	0	95.65	106.53	0.00	172.47	0.00	-2589.80	-	-	0.00	-13.71	0.05
140	0	98.40	103.25	0.00	170.72	0.00	-2273.30	-	-	0.00	-17.06	0.05
160	0	97.33	103.36	0.00	169.99	0.00	-1939.70	-	-	0.00	-20.90	0.06
180	0	93.09	106.19	0.00	166.46	0.00	-1614.80	-	-	0.00	-25.29	0.06
200	0	86.49	110.52	0.00	147.98	0.00	-1315.50	-	-	0.00	-30.30	0.06
220	2.51	77.83	114.27	0.00	122.18	0.00	-1063.70	-	-	0.00	-36.51	0.06
240	10.3	69.00	107.64	0.00	98.00	0.00	-835.36	-	-	0.00	-43.20	0.06
260	20.76	60.03	89.95	0.00	78.32	0.00	-644.44	-	-	0.00	-50.85	0.06
280	34.54	51.33	73.15	0.00	62.78	0.00	-488.67	-	-	0.00	-59.62	0.06
300	52.34	43.09	59.50	0.00	50.49	0.00	-364.49	-	-	0.00	-69.72	0.05

Conclusions:

Calcium Carbonate scale is indicated at all temperatures from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate Scaling Index is negative from 80°F to 300°F

Notes:

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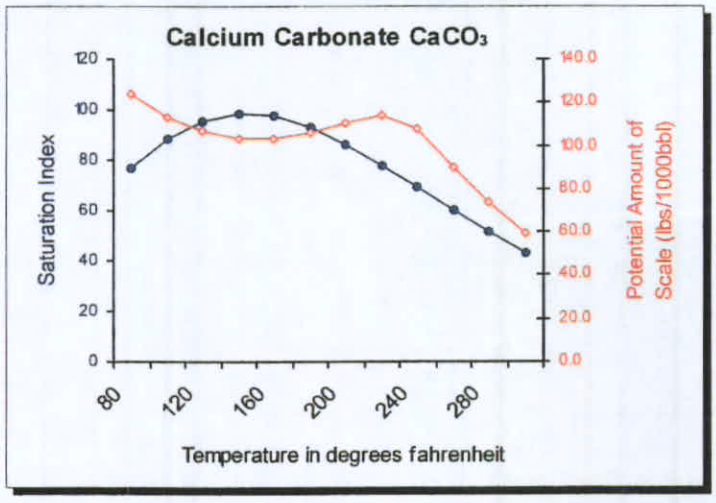
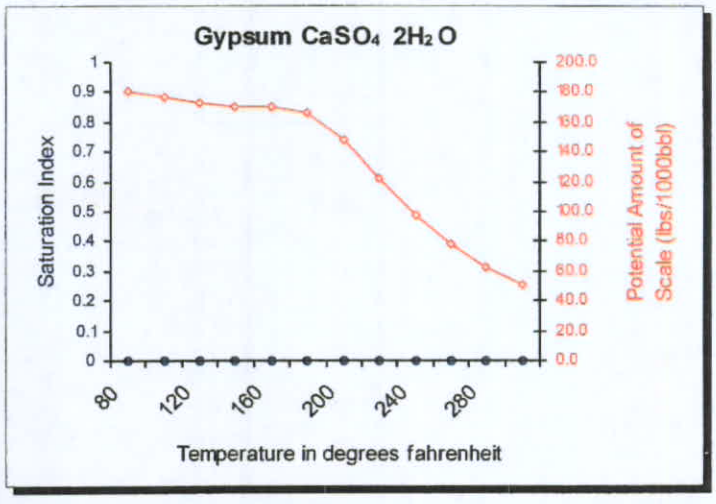
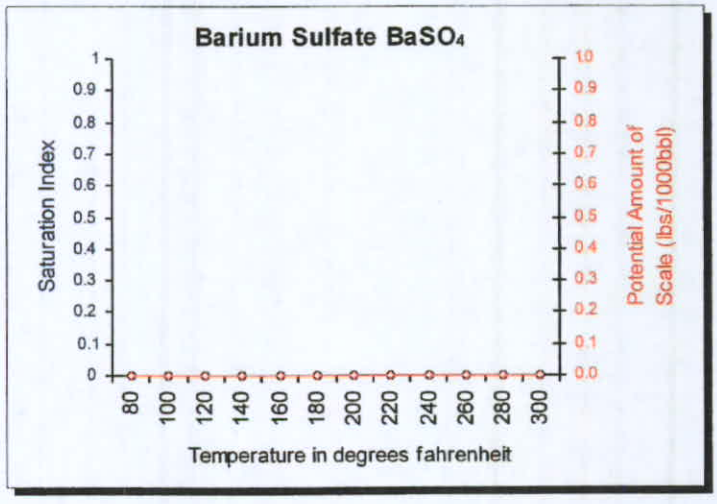
Scale Prediction Graphs

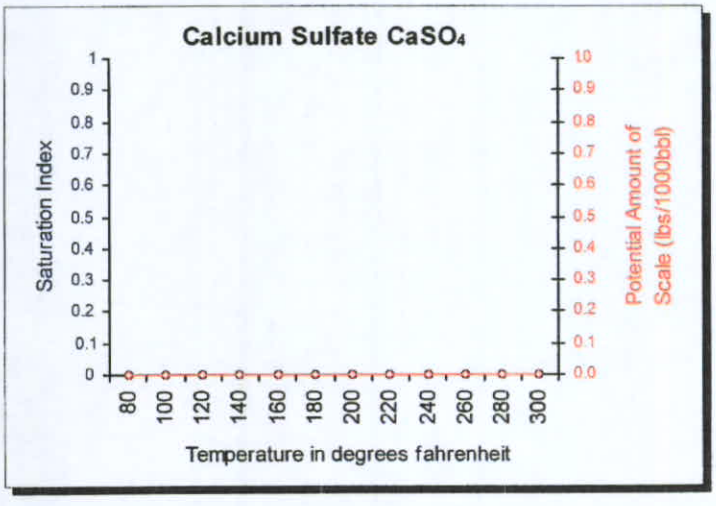
Well Name: **YELLOW CREEK FED 2-22-1**

Sample ID: **WA-13292**









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Water Analysis Report

Production Company: **BASS OPERATING PROD**
Well Name: **YELLOW CREEK FEDERAL 5-32-1**
Sample Point: **Separator**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13296**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	170
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0110
pH:	8.8
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	16889
Molar Conductivity (µS/cm):	25590
Resitivity (Mohm):	0.3908

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	0.01	Chloride (Cl):	8861.00
Magnesium (Mg):	292.80	Sulfate (SO_4):	0.01
Barium (Ba):	3.66	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	1891.00
Sodium (Na):	5837.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	0.01
Iron (Fe):	3.59	Phosphate (PO_4):	-
Manganese (Mn):	0.38	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
170	*0*	*0.01*	-2.37	*0.00*	-2265.40	*0.00*	-1936.20	-	-	*0.00*	-25.00	*0.04*
80	0	0.01	-3.58	0.00	114.79	0.00	-3235.70	-	-	0.00	-9.23	0.03
100	0	0.01	-2.84	0.00	125.71	0.00	-3049.60	-	-	0.00	-11.89	0.03
120	0	0.01	-2.47	0.00	127.46	0.00	-2774.00	-	-	0.00	-14.99	0.04
140	0	0.01	-2.30	0.00	121.59	0.00	-2447.90	-	-	0.00	-18.58	0.04
160	0	0.01	-2.31	0.00	109.34	0.00	-2105.30	-	-	0.00	-22.71	0.05
180	0	0.01	-2.47	0.00	93.71	0.00	-1771.80	-	-	0.00	-27.45	0.05
200	0	0.01	-2.75	0.00	77.67	0.00	-1464.30	-	-	0.00	-32.86	0.05
220	2.51	0.01	-3.19	0.00	63.98	0.00	-1206.20	-	-	0.00	-39.54	0.05
240	10.3	0.00	-3.70	0.00	51.76	0.00	-970.37	-	-	0.00	-46.72	0.05
260	20.76	0.00	-4.32	0.00	41.93	0.00	-772.18	-	-	0.00	-54.90	0.05
280	34.54	0.00	-5.03	0.00	34.11	0.00	-609.18	-	-	0.00	-64.23	0.05
300	52.34	0.00	-5.82	0.00	27.93	0.00	-477.55	-	-	0.00	-74.93	0.04

Conclusions:

Calcium Carbonate Scaling Index is negative from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate Scaling Index is negative from 80°F to 300°F

Notes:

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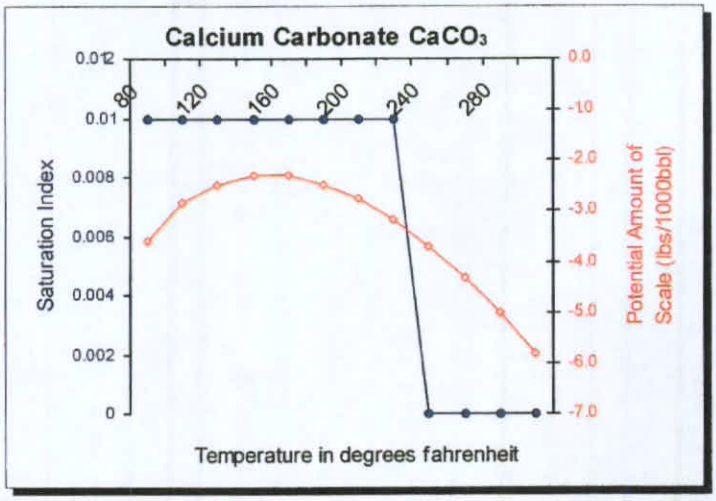
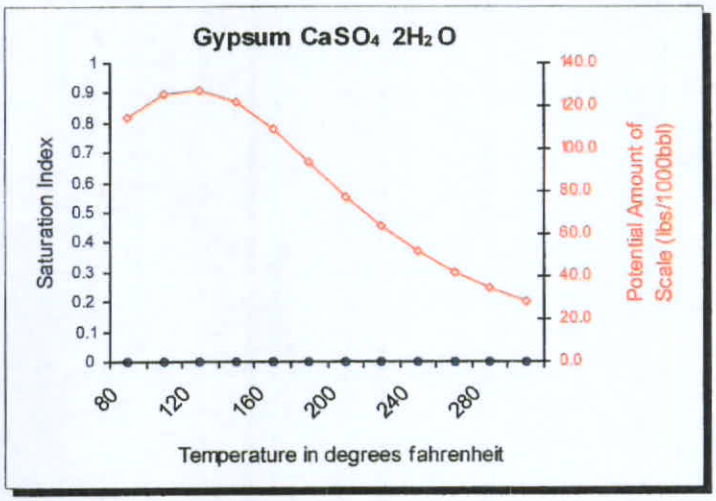
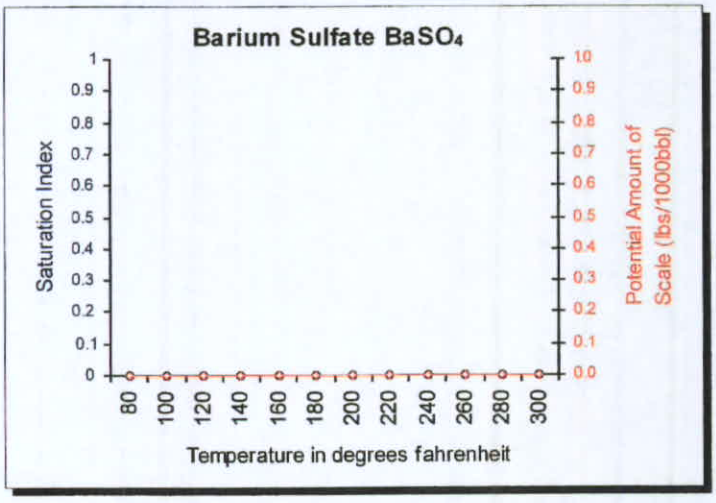
Scale Prediction Graphs

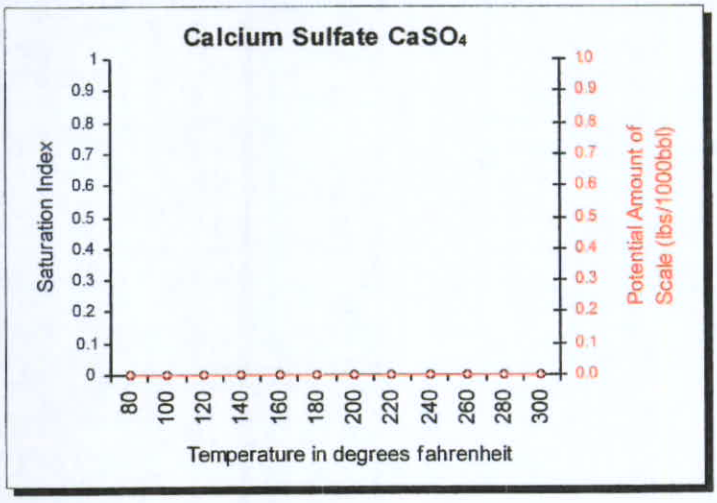
Well Name: **YELLOW CREEK FEDERAL 5-32-1**

Sample ID: **WA-13296**









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Water Analysis Report

Production Company: **BASS OPERATING PROD**
Well Name: **YELLOW CREEK FED 3-11-1**
Sample Point: **Separator**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13293**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	100
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0130
pH:	8.7
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	18495
Molar Conductivity (µS/cm):	28022
Resitivity (Mohm):	0.3569

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	0.01	Chloride (Cl):	8466.00
Magnesium (Mg):	195.20	Sulfate (SO_4):	0.01
Barium (Ba):	2.91	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	3477.00
Sodium (Na):	6345.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	5.00
Iron (Fe):	3.29	Phosphate (PO_4):	-
Manganese (Mn):	0.36	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
100	*0*	*0.01*	*-1.68*	*0.00*	*-2944.80*	*0.00*	*-3078.80*	-	-	*0.00*	*-12.57*	*0.11*
80	0	0.01	-2.18	0.00	193.39	0.00	-3267.10	-	-	0.00	-9.85	0.07
100	0	0.01	-1.68	0.00	216.41	0.00	-3078.80	-	-	0.00	-12.57	0.08
120	0	0.01	-1.43	0.00	224.36	0.00	-2798.70	-	-	0.00	-15.71	0.09
140	0	0.01	-1.30	0.00	219.20	0.00	-2466.90	-	-	0.00	-19.33	0.10
160	0	0.01	-1.27	0.00	201.96	0.00	-2118.60	-	-	0.00	-23.46	0.11
180	0	0.01	-1.33	0.00	176.75	0.00	-1780.20	-	-	0.00	-28.19	0.12
200	0	0.01	-1.47	0.00	148.77	0.00	-1469.20	-	-	0.00	-33.58	0.12
220	2.51	0.01	-1.70	0.00	123.53	0.00	-1209.20	-	-	0.00	-40.25	0.12
240	10.3	0.01	-1.99	0.00	100.33	0.00	-972.47	-	-	0.00	-47.44	0.12
260	20.76	0.01	-2.37	0.00	81.28	0.00	-773.98	-	-	0.00	-55.65	0.12
280	34.54	0.01	-2.82	0.00	66.05	0.00	-610.87	-	-	0.00	-65.03	0.12
300	52.34	0.01	-3.37	0.00	54.05	0.00	-479.07	-	-	0.00	-75.80	0.11

Conclusions:

Calcium Carbonate Scaling Index is negative from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate Scaling Index is negative from 80°F to 300°F

Notes:

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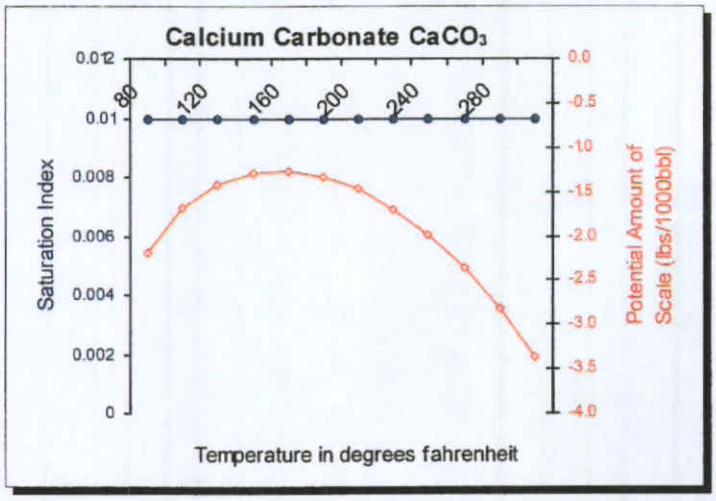
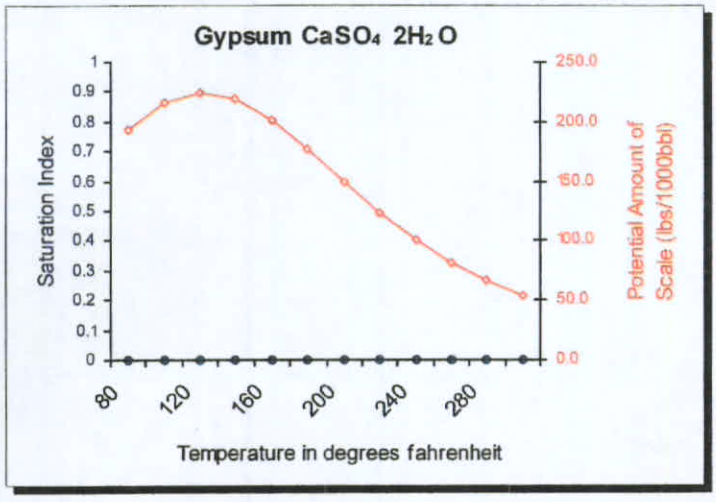
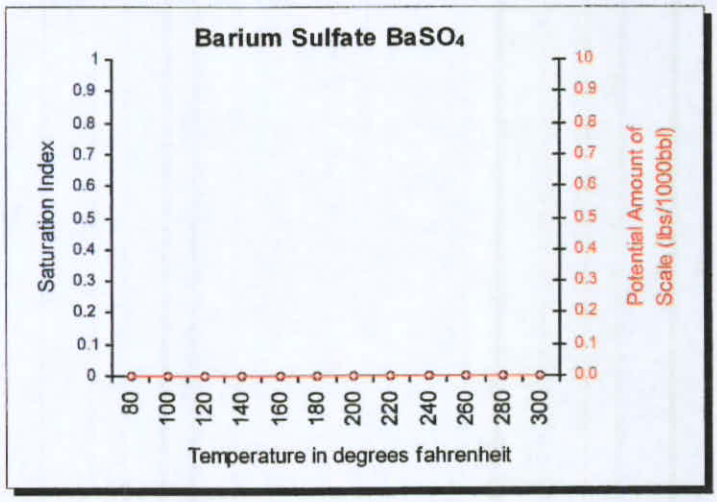
Scale Prediction Graphs

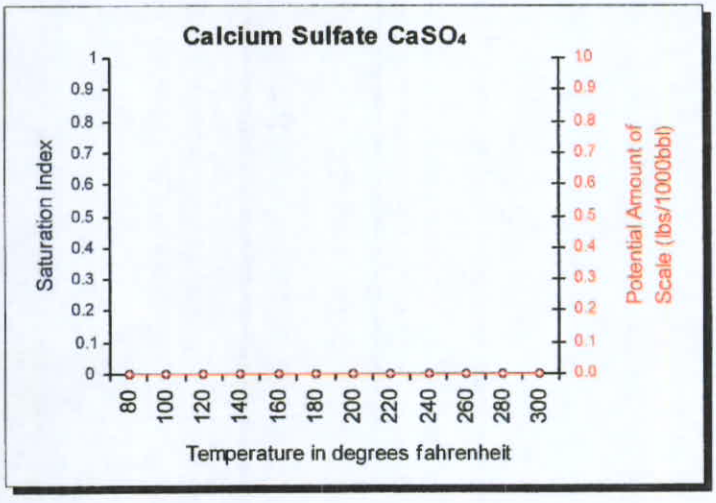
Well Name: **YELLOW CREEK FED 3-11-1**

Sample ID: **WA-13293**









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Water Analysis Report

Production Company: **BASS OPERATING PROD**
Well Name: **YELLOW CREEK FED 32-33-1**
Sample Point: **Wellhead**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13297**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	100
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0160
pH:	8.9
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	21188
Molar Conductivity (µS/cm):	32104
Resitivity (Mohm):	0.3115

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	240.00	Chloride (Cl):	11841.00
Magnesium (Mg):	341.60	Sulfate (SO_4):	5.00
Barium (Ba):	23.61	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	1525.00
Sodium (Na):	7207.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	0.01
Iron (Fe):	4.56	Phosphate (PO_4):	-
Manganese (Mn):	0.66	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
100	*0*	*116.07*	*119.79*	*0.00*	*-2819.50*	*0.00*	*-2995.90*	-	-	*1.34*	*1.88*	*0.02*
80	0	99.23	114.48	0.00	96.75	0.00	-3181.50	-	-	2.10	4.26	0.02
100	0	116.07	119.79	0.00	101.37	0.00	-2995.90	-	-	1.34	1.88	0.02
120	0	125.06	115.98	0.00	98.21	0.00	-2709.90	-	-	0.87	-1.06	0.02
140	0	126.56	105.63	0.00	89.50	0.00	-2365.30	-	-	0.57	-4.63	0.02
160	0	121.29	91.29	0.00	77.38	0.00	-1998.70	-	-	0.38	-8.89	0.02
180	0	111.27	75.92	0.00	64.39	0.00	-1638.90	-	-	0.26	-13.90	0.03
200	0	98.68	61.62	0.00	52.30	0.00	-1306.10	-	-	0.18	-19.72	0.03
220	2.51	84.58	50.14	0.00	42.60	0.00	-1028.20	-	-	0.12	-26.96	0.03
240	10.3	71.81	40.22	0.00	34.22	0.00	-776.80	-	-	0.09	-34.83	0.02
260	20.76	60.13	32.38	0.00	27.58	0.00	-570.55	-	-	0.07	-43.86	0.02
280	34.54	49.65	26.21	0.00	22.34	0.01	-407.53	-	-	0.05	-54.27	0.02
300	52.34	40.44	21.38	0.00	18.24	0.01	-283.55	-	-	0.04	-66.35	0.02

Conclusions:

Calcium Carbonate scale is indicated at all temperatures from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate NO CONCLUSION

Notes:

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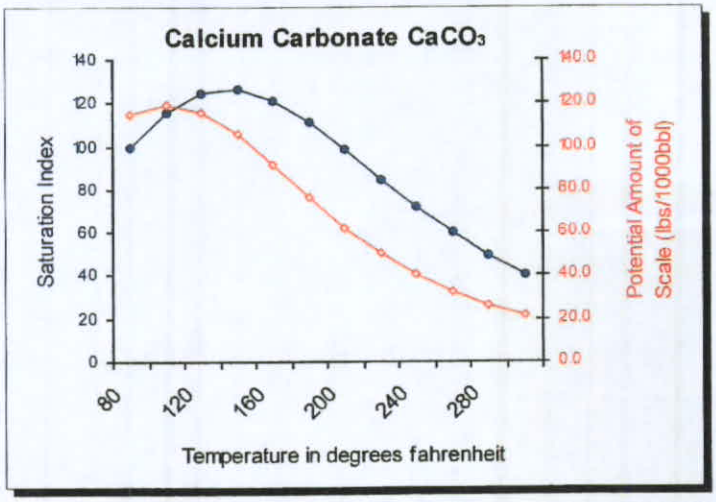
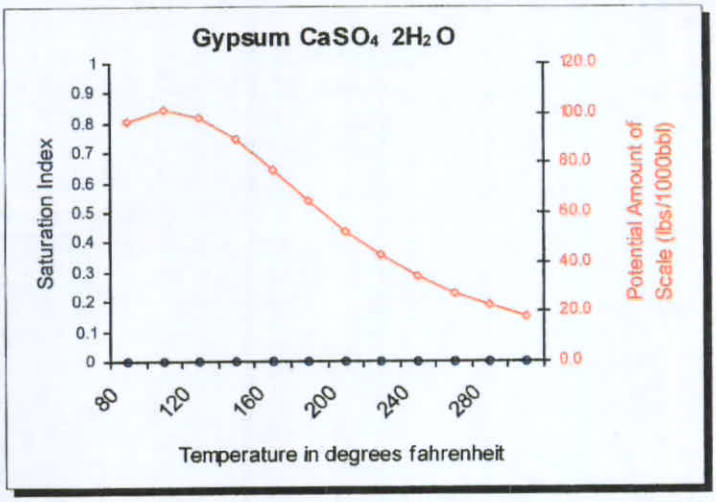
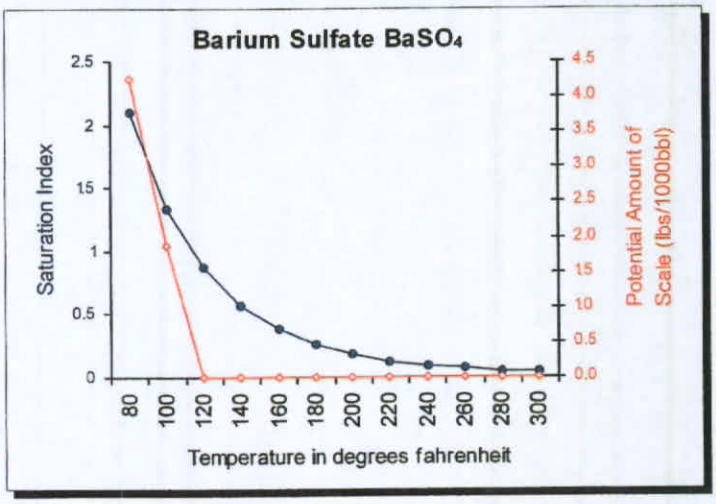
Scale Prediction Graphs

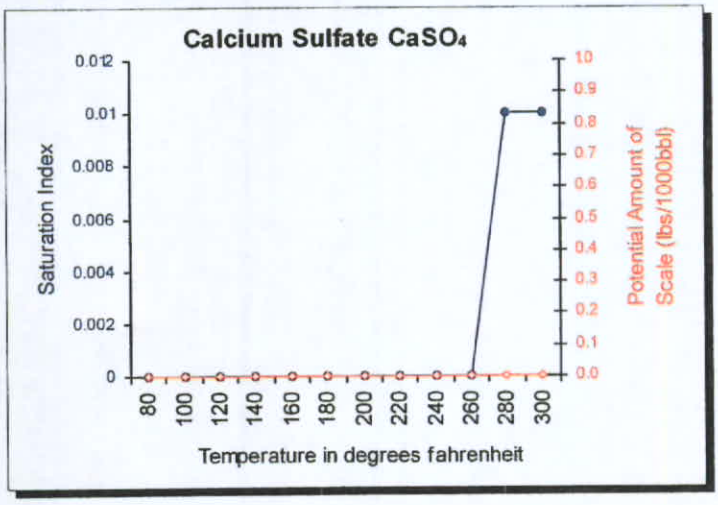
Well Name: **YELLOW CREEK FED 32-33-1**

Sample ID: **WA-13297**









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Water Analysis Report

Production Company: **BASS OPERATING PROD**
Well Name: **YELLOW CREEK 29-32-1**
Sample Point: **Separator**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13294**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	65
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0150
pH:	8.7
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	21642
Molar Conductivity (µS/cm):	32790
Resitivity (Mohm):	0.3050

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	160.00	Chloride (Cl):	11477.00
Magnesium (Mg):	48.80	Sulfate (SO_4):	26.00
Barium (Ba):	6.67	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	2074.00
Sodium (Na):	7826.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	4.00
Iron (Fe):	18.61	Phosphate (PO_4):	-
Manganese (Mn):	0.53	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
65	*0*	*63.11*	*123.07*	*0.00*	*-2807.90*	*0.00*	*-3304.90*	-	-	*4.93*	*8.59*	*0.07*
80	0	77.38	140.43	0.00	95.00	0.00	-3257.50	-	-	3.51	7.56	0.04
100	0	92.89	154.48	0.00	101.90	0.00	-3074.00	-	-	2.28	5.75	0.05
120	0	102.64	156.70	0.00	103.06	0.00	-2790.00	-	-	1.52	3.34	0.05
140	0	106.84	149.21	0.00	101.46	0.00	-2447.10	-	-	1.03	0.26	0.06
160	0	105.40	133.71	0.00	97.16	0.00	-2081.90	-	-	0.71	-3.58	0.07
180	0	99.30	113.88	0.00	88.23	0.00	-1722.80	-	-	0.49	-8.26	0.07
200	0	90.12	93.59	0.00	75.05	0.00	-1389.40	-	-	0.35	-13.84	0.07
220	2.51	78.60	76.18	0.00	61.91	0.01	-1108.90	-	-	0.24	-20.90	0.07
240	10.3	67.57	60.83	0.00	49.66	0.01	-852.90	-	-	0.18	-28.71	0.07
260	20.76	57.11	48.56	0.00	39.59	0.02	-639.18	-	-	0.13	-37.74	0.07
280	34.54	47.57	38.95	0.00	31.50	0.03	-465.80	-	-	0.09	-48.14	0.07
300	52.34	39.16	31.52	0.00	25.07	0.04	-329.14	-	-	0.07	-60.15	0.07

Conclusions:

Calcium Carbonate scale is indicated at all temperatures from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate NO CONCLUSION

Notes:

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Multi-Chem Analytical Laboratory
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Sonora, TX 76950

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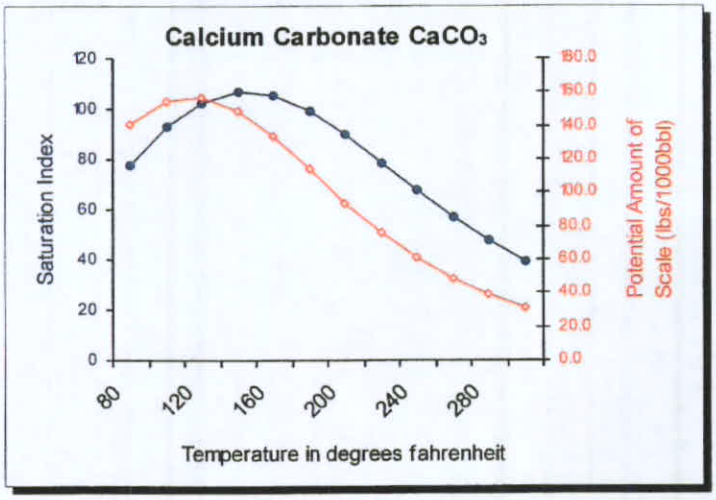
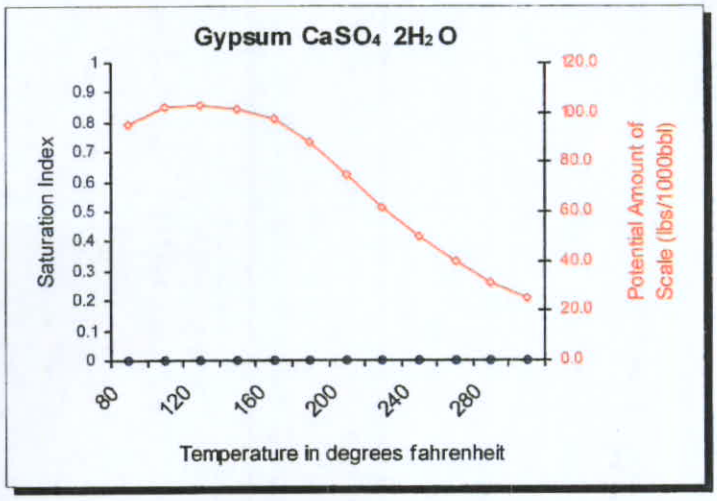
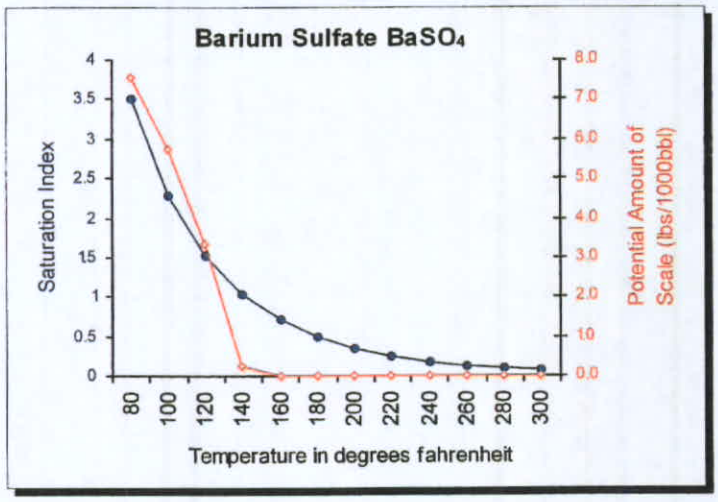
Scale Prediction Graphs

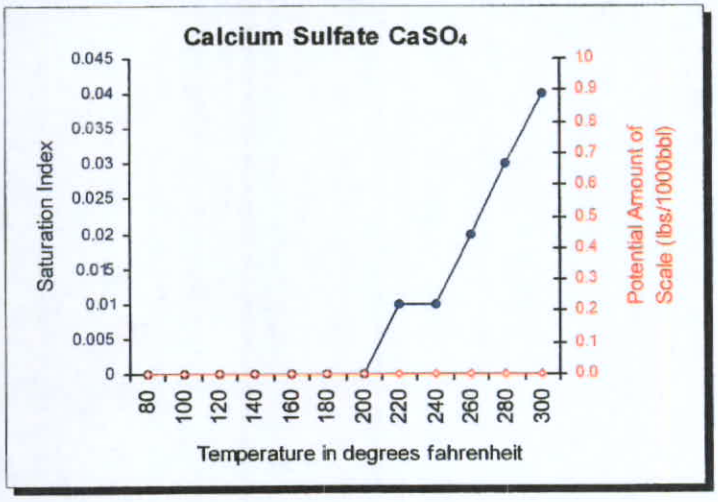
Well Name: **YELLOW CREEK 29-32-1**

Sample ID: **WA-13294**









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Water Analysis Report

Production Company: **BASS ENTERPRISES**
Well Name: **YELLOW CREEK FEDERAL 34-22-1**
Sample Point: **Separator**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13290**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	120
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0120
pH:	8.7
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	18712
Molar Conductivity (µS/cm):	28351
Resitivity (Mohm):	0.3527

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	80.00	Chloride (Cl):	8874.00
Magnesium (Mg):	48.80	Sulfate (SO_4):	57.00
Barium (Ba):	2.23	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	2989.00
Sodium (Na):	6622.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	10.00
Iron (Fe):	28.05	Phosphate (PO_4):	-
Manganese (Mn):	0.72	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
120	*0*	*72.21*	*114.34*	*0.00*	*-2629.50*	*0.00*	*-2705.20*	-	-	*1.33*	*0.91*	*0.10*
80	0	55.33	130.58	0.00	99.19	0.00	-3160.60	-	-	3.03	2.51	0.06
100	0	65.59	121.69	0.00	96.59	0.00	-2980.30	-	-	1.98	1.85	0.07
120	0	72.21	114.34	0.00	93.10	0.00	-2705.20	-	-	1.33	0.91	0.08
140	0	75.63	109.82	0.00	89.89	0.00	-2375.70	-	-	0.91	-0.38	0.09
160	0	75.82	108.43	0.00	87.41	0.00	-2026.90	-	-	0.63	-2.12	0.10
180	0	73.19	109.62	0.00	85.46	0.00	-1685.90	-	-	0.44	-4.44	0.11
200	0	68.42	111.77	0.00	83.28	0.00	-1370.80	-	-	0.32	-7.45	0.10
220	2.51	61.71	110.42	0.00	80.05	0.01	-1105.50	-	-	0.22	-11.62	0.10
240	10.3	54.78	96.81	0.00	73.16	0.01	-863.50	-	-	0.16	-16.61	0.10
260	20.76	47.70	79.52	0.00	62.57	0.02	-660.14	-	-	0.12	-22.76	0.10
280	34.54	40.86	64.52	0.00	51.24	0.03	-493.00	-	-	0.09	-30.24	0.10
300	52.34	34.48	52.49	0.00	41.20	0.05	-358.34	-	-	0.06	-39.23	0.10

Conclusions:

Calcium Carbonate scale is indicated at all temperatures from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate NO CONCLUSION

Notes:

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Multi-Chem Analytical Laboratory
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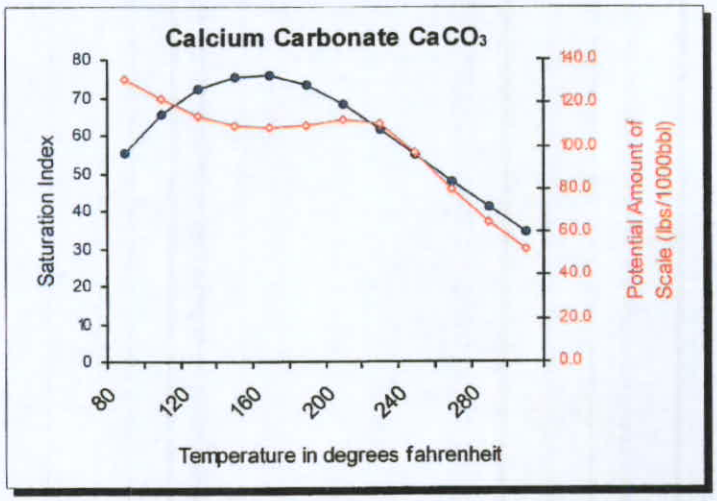
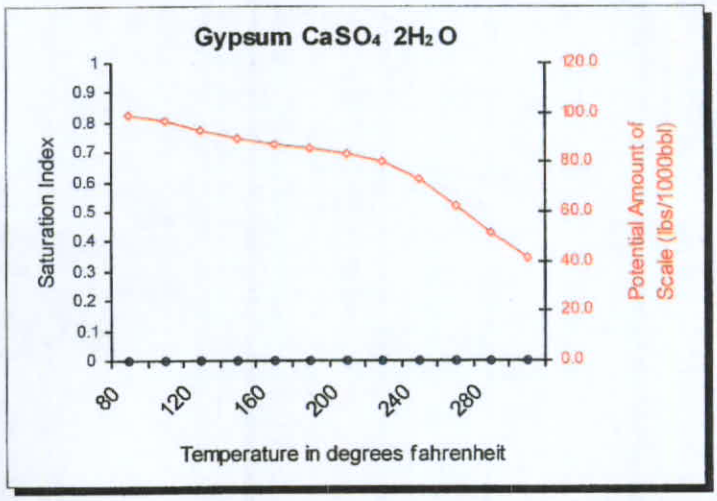
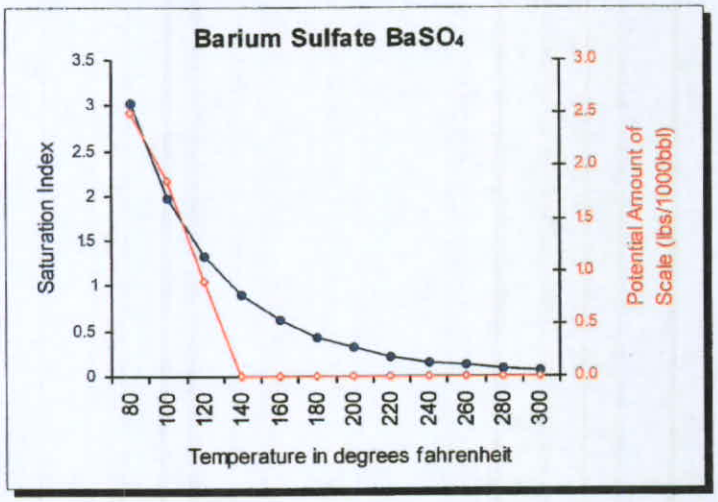
Scale Prediction Graphs

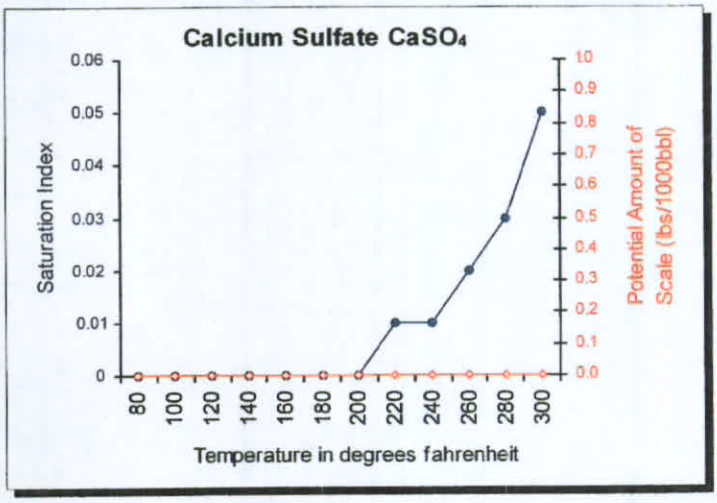
Well Name: **YELLOW CREEK FEDERAL 34-22-1**

Sample ID: **WA-13290**









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Water Analysis Report

Production Company: **BASS ENTERPRISES**
Well Name: **YELLOW CREEK FEDERAL 33-22-1**
Sample Point: **Separator**
Sample Date: **8 /11/2008**
Sales Rep: **Randy Huber**
Lab Tech: **Mikeal Nunn**

Sample ID: **WA-13291**

Sample Specifics

Test Date:	8/18/2008
Temperature (°F):	165
Sample Pressure (psig):	0
Specific Gravity (g/cm³):	1.0130
pH:	9
Turbidity (NTU):	-
Calculated T.D.S. (mg/L)	16313
Molar Conductivity (µS/cm):	24717
Resitivity (Mohm):	0.4046

Analysis @ Properties in Sample Specifics

Cations	*mg/L*	*Anions*	*mg/L*
Calcium (Ca):	0.01	Chloride (Cl):	7411.00
Magnesium (Mg):	97.60	Sulfate (SO_4):	34.00
Barium (Ba):	0.01	Dissolved CO_2:	0.01
Strontium (Sr):	-	Bicarbonate (HCO_3):	3050.00
Sodium (Na):	5705.00	Carbonate (CO_3):	-
Potassium (K):	-	H_2S:	4.00
Iron (Fe):	11.06	Phosphate (PO_4):	-
Manganese (Mn):	0.44	Silica (SiO_2):	-
Lithium (Li):	-	Fluoride (F):	-
Aluminum (Al):	-	Nitrate (NO_3):	-
Ammonia NH_3:	-	Lead (Pb):	-
		Zinc (Zn):	-
		Bromine (Br):	-
		Boron (B):	-

Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl

Test Conditions		Calcium Carbonate $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Calcium Sulfate $CaSO_4$		Strontium Sulfate $SrSO_4$		Barium Sulfate $BaSO_4$		Calculated CO_2
Temp °F	Gauge Press. psi	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	Sat Index	Scale	psi
165	*0*	*0.01*	*-1.03*	*0.00*	*-2188.80*	*0.00*	*-1923.40*	-	-	*0.00*	*-8.67*	*0.04*
80	0	0.01	-1.38	0.00	173.31	0.00	-3117.90	-	-	0.01	-1.78	0.03
100	0	0.01	-1.11	0.00	168.67	0.00	-2934.70	-	-	0.01	-2.70	0.03
120	0	0.01	-1.00	0.00	167.67	0.00	-2662.80	-	-	0.00	-3.98	0.04
140	0	0.01	-0.97	0.00	169.26	0.00	-2341.90	-	-	0.00	-5.71	0.04
160	0	0.01	-1.01	0.00	171.81	0.00	-2006.40	-	-	0.00	-7.99	0.04
180	0	0.01	-1.12	0.00	170.66	0.00	-1681.60	-	-	0.00	-10.95	0.05
200	0	0.01	-1.29	0.00	150.62	0.00	-1383.80	-	-	0.00	-14.66	0.04
220	2.51	0.01	-1.55	0.00	122.15	0.00	-1134.60	-	-	0.00	-19.54	0.04
240	10.3	0.01	-1.87	0.00	96.54	0.00	-908.39	-	-	0.00	-25.11	0.04
260	20.76	0.01	-2.27	0.00	76.22	0.00	-718.98	-	-	0.00	-31.68	0.04
280	34.54	0.01	-2.76	0.00	60.38	0.00	-563.62	-	-	0.00	-39.39	0.04
300	52.34	0.01	-3.34	0.00	48.00	0.00	-438.38	-	-	0.00	-48.49	0.04

Conclusions:

Calcium Carbonate Scaling Index is negative from 80°F to 300°F
Gypsum Scaling Index is negative from 80°F to 300°F
Calcium Sulfate Scaling Index is negative from 80°F to 300°F
Strontium Sulfate scaling was not evaluated
Barium Sulfate Scaling Index is negative from 80°F to 300°F

Notes:

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Multi-Chem Analytical Laboratory
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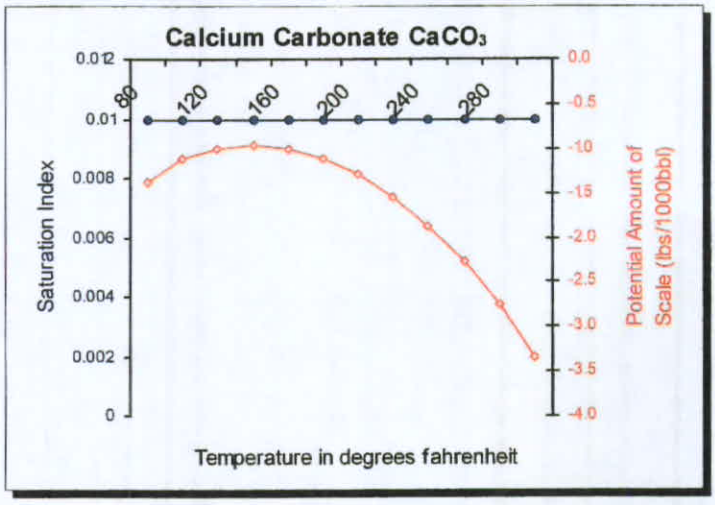
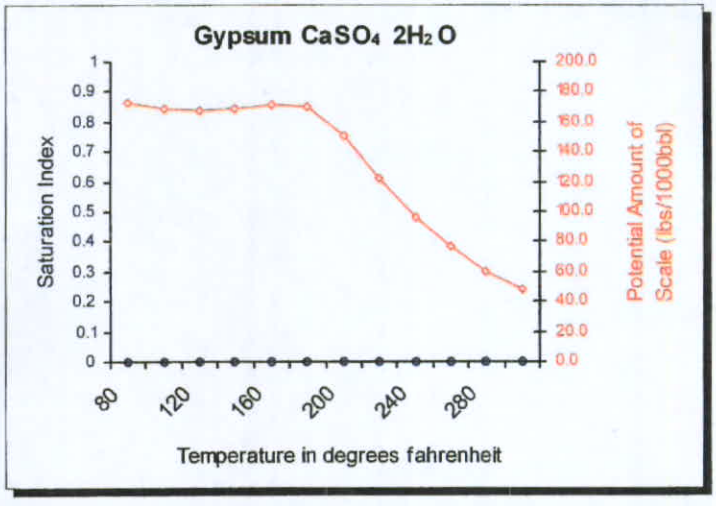
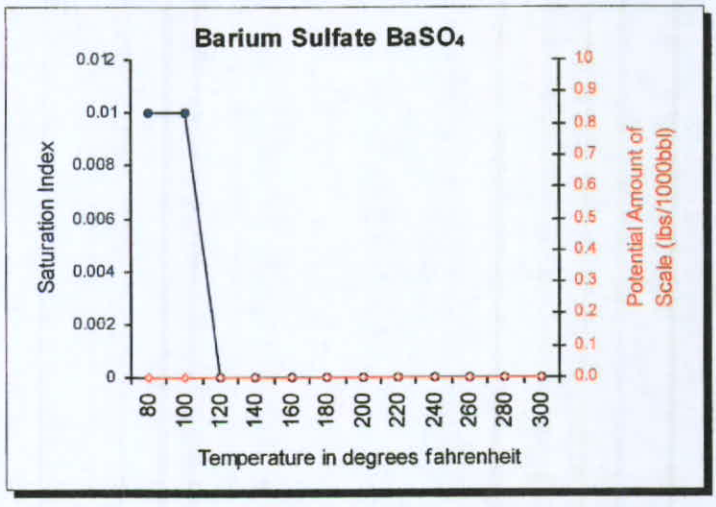
Scale Prediction Graphs

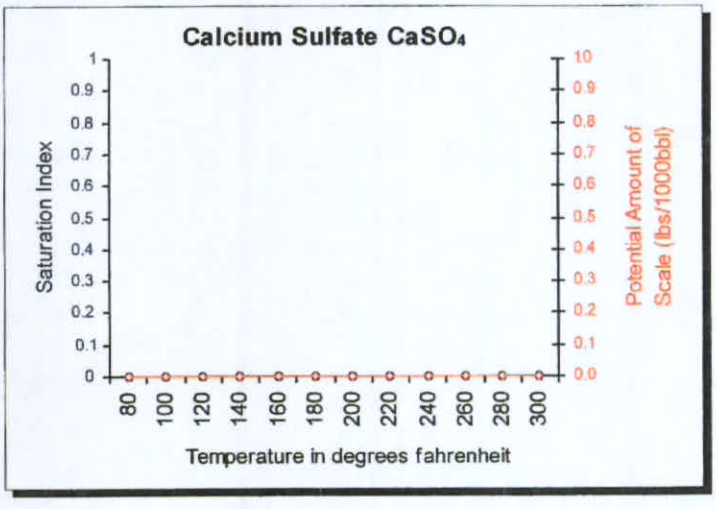
Well Name: **YELLOW CREEK FEDERAL 33-22-1**

Sample ID: **WA-13291**









ATTACHMENT NO. 6

COMPLETION DATA FOR ALL WELLS IN THE AOR

Well Completion Data
Yellow Creek Federal 4-16-1

WELL NAME	SURFACE CASING				1st Production Casing				2nd PRODUCTION CASING			
	SIZE	DEPTH	CEMENT AMOUNT	CEMENT TOP	SIZE	DEPTH	CEMENT AMOUNT	ESTIMATED CEMENT TOP	SIZE	DEPTH	CEMENT AMOUNT	ESTIMATED CEMENT TOP
YCF 4-16-1	9.625	3350	850 sx	Surface	5.5	11000	700 sx	2500	5.5	11000	1300 sx	2500
YCF 4-24-1	9.625	3400	1403 sx	Surface	4.5	12198	1369 sx	6000	~	~	~	~

	API	LEASE #	STATUS
YCF 4-16-1	05-103-10404	COC 59393	conversion to UIC well
YCF 4-24-1	05-103-11202	COC 59393	Proposed

FORM 4
Rev 12/05

02053361

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver Colorado 80203 Phone (303)894-2100 Fax (303)894-2109

RECEIVED
MAY 15 2008
COGCC

SUNDRY NOTICE

Submit original plus one copy This form is to be used for general, technical and environmental sundry information For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form) Identify well or other facility by API Number or by OGCC Facility ID Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b)

1 OGCC Operator Number 10172
2 Name of Operator BOPCO, L P
3 Address 9949 South Oswego Street, Suite 200
City Parker State CO Zip 80134
4 Contact Name Ashley Tolbert
Phone 303-799-5080
Fax 303-799-5081

Complete the Attachment Checklist — OP OGCC

5 API Number 05- 103-10404
6 Well/Facility Name Yellow Creek Federal
7 Well/Facility Number 4-16-1
8 Location (Qtr/Qtr, Sec, Twp, Rng, Meridian) SWSW, Sec 4, T1S, R98W, 6 PM
9 County Rio Blanco
10 Field Name Wildcat
11 Federal, Indian or State Lease Number COC59393
OGCC Facility ID Number 270716

Attachment Checklist	OP	OGCC
Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page	X	
Other		

General Notice

☐ CHANGE OF LOCATION Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage **from** Exterior Section Lines				
Change of **Surface** Footage **to** Exterior Section Lines				
Change of **Bottomhole** Footage **from** Exterior Section Lines				
Change of **Bottomhole** Footage **to** Exterior Section Lines				attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer
Latitude
Longitude
Ground Elevation
Distance to nearest property line
Distance to nearest lease line
Distance to nearest well same formation
Distance to nearest bldg, public rd, utility or RR
Is location in a High Density Area (rule 603b)? Yes/No
Surface owner consultation date

GPS DATA
Date of Measurement PDOP Reading Instrument Operator's Name

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling)
Effective Date
Plugging Bond ☐ Blanket ☐ Individual

☐ CHANGE WELL NAME NUMBER
From
To
Effective Date

☐ ABANDONED LOCATION
Was location ever built? ☐ Yes ☐ No
Is site ready for inspection? ☐ Yes ☐ No
Date Ready for Inspection

☐ NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years Date of last MIT

☐ SPUD DATE

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

☐ RECLAMATION Attach technical page describing final reclamation procedures per Rule 1004
Final reclamation will commence on approximately
☐ Final reclamation is completed and site is ready for inspection

Technical Engineering/Environmental Notice

☒ Notice of Intent
Approximate Start Date May 2008
☐ Report of Work Done
Date Work Completed

Details of work must be described in full on Technical Information Page (Page 2 must be submitted)

☐ Intent to Recomplete (submit form 2)	☐ Request to Vent or Flare	☐ E&P Waste Disposal
☐ Change Drilling Plans	☐ Repair Well	☐ Beneficial Reuse of E&P Waste
☐ Gross Interval Changed?	☐ Rule 502 variance requested	☐ Status Update/Change of Remediation Plans for Spills and Releases
☒ Casing/Cementing Program Change	☐ Other	

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete

Signed Ashley Tolbert Date 5/13/08 Email
Print Name Ashley Tolbert Title Completion Engineer

COGCC Approved Daniel Arnold Title PE II Date 5/19/2008
CONDITIONS OF APPROVAL, IF ANY

FORM 4 Rev 12/05

Page 2

TECHNICAL INFORMATION PAGE

RECEIVED
MAY 15 2008
COGCC

1	OGCC Operator Number	10172	API Number	05-103-10404
2	Name of Operator	BOPCO, L P	OGCC Facility ID #	270716
3	Well/Facility Name	Yellow Creek Federal	Well/Facility Number	4-16-1
4	Location (QtrQtr, Sec, Twp, Rng, Meridian)	SWSW, Sec 4, T1S, R98W, 6 PM		

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1

5 **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

Objective Identify and charactenze areas of poor or no cement with Schlumberger Isolation Scanner Once areas are identified, remediate cement job by block squeeze to provide a continuous column of cement with the integrity to withstand frac pressures Once bond is verified suspend well for future hydraulic fracture stimulation

Tubular Data
Size/Weight/Grade Depth (ft) ID (in) Drift (in) Capacity (gal/ft) Capacity (bbl/ft) Burst (psi) Collapse (psi)
4-1/2" 11 6# LS-110 LTC 11,380' 4 000 3 875 0 6528 0 01550 10,690 7,580
2-3/8" 4 7# EUE 11,012' 1 995 1 901 0 1624 0 00387 11,200 11,780

1 Prepare location for completion work Make sure there is space to temporanly store tubing
2 Move in and rig up pulling unit (along with ancillary tankage, pumps and power swivel) Nipple down wellhead and nipple up BOPE Pick up 2 3/8" tubing Pull all 338 joints out of the hole laying down
3 Store tubing on location (It will be run back in at the end of the completion)
4 ND BOP and NU wellhead RDMO pulling unit, power swivel, and ancillary equipment
5 MIRU Schlumberger electric wireline and mast unit Unless pressure was observed when pulling tubing, extra pressure control such as a lubricator or pack off is not needed because casing is not perforated PU & TIH with gauge ring and junk basket to PBTD *Note any obstructions and record PBTD PBTD estimated at 11,307' Note Marker joints at 5,985'MD,* 8,924'MD & 9,969'MD DVT's at 5,984'MD and 8,984'MD POH and LD JB/GR
6 PU and RIH with Isolation Scanner to 10,700' MD Correlate to Halliburton CH logs dated 11/14/2007 (Radial Cement Bond Log) Do not use the repeat section for correlation purposes Log interval from 10,700' MD to 8,700' MD only POOH to 7,700' MD Log from 7,700' MD to 5,700' MD only POOH to surface
7 RDMO Schlumberger wireline
8 Wait on evaluation of logs in the Denver office
9 Suspend well operations until further notice

Cement Procedure
1 Move in and rig up pulling unit (along with ancillary tankage, pumps and power swivel) Nipple down wellhead and nipple up BOPE
2 MIRU Wireline company
3 RIH and perforate at X,XXX' (depth designated by engineer from SLB bond log) with 0 42" holes 32 gram charges, 3 shots per foot POOH and RD wireline
4 PU cement retainer and RIH with tubing to X,XXX' (depth designated by engineer from SLB bond log) and set retainer
5 MIRU cement crew
6 Pump block squeeze job down tubing into open perforations Once job is finished, sting out of retainer and POOH with tubing
7 RDMO Cement crew
8 PU bit and RIH to retainer and drill up retainer
9 Make another run with bit and scraper to ensure residual cement is removed from the walls of the casing
10 MIRU wireline to run another CCL/CBL
11 Run new cement bond log to evaluate the job
12 RDMO wireline
13 Nipple down BOPE and nipple up wellhead
14 RDMO pulling unit and all other associated equipment
15 Suspend operations until further notice from the Denver Officed

LEASE	YELLOW CREEK FEDERAL — WELL #. 4-16-1
FIELD.	MESA VERDE EXPLORATORY
LOCATION	798' FSL & 689' FWL SEC 4, T1S, R98W
COUNTY	RIO BLANCO — ST CO — API 05-103-10404

KB 6637'
GL 6613'
SPUD DATE 8/9/2007
COMP DATE 11/1/2007

NOTE GL = 6350' ON THE PLAT FOR THIS WELL.

CONDUCTOR

SIZE	20"
WT/GRD	94# J-55
CSA	76'
CMT	
CIRC	
TOC	SURF
HOLE SIZE	26" 0-80'

SURFACE CASING

SIZE	9-5/8"
WT/GRD	36 #/ft
WT/GRD	J-55 LT&C
CSA	3,432' Driller
CMT	1865 sx (2stgs)
Lead	440 sx Rockies LT (12 3 ppg 2 35 yld)
Tail	425 sx Rockies LT(12 8 ppg 2 09 yld)
Lead	650 sx Rockies LT(12 3 ppg 2 35 yld)
Top Out	350 sx Standard(14 5 ppg 1 41yld)
CIRC	YES
TOC	SURF
HOLE SIZE	14-3/4" 0-3 435 (KB)

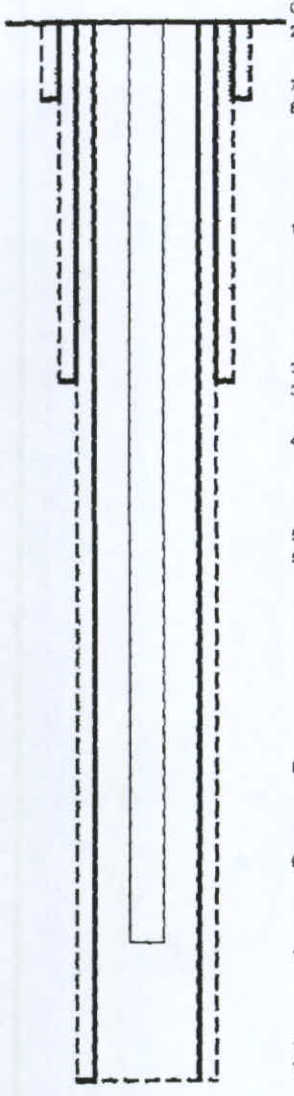
PRODUCTION CASING

SIZE	4-1/2"
WT/GRD	11 6 #/ft / LS-110 LT & C
CSA	11 380' Driller
CMT	1230 sx (3 stgs)
Lead	430 sx Poz Prem 50/50 (13 5 ppg 1 68 yld)
Lead	155 sx Halliburton Lt Premium+2% Bentonite (12 7 ppg 1 93 yld)
Tail	350 sx Poz Prem 50/50 (13 5 ppg 1 7 yld)
Tail	295 sx Highbond 75+6% Bentonite (12 7 ppg 1 93 yld)
CIRC	YES
TOC	TBD
HOLE SIZE	7-7/8" to TD

Marker joints @ 9 969' 8 924' & 5 985'

TUBING

SIZE	2 3/8'
WT/GRD	
DEPTH	11 012' (KB)
JTS	



0 GL	
24 KB	
76'	20 94#/ft J-55 CSG
80'	29 Hole
1 260'	Surface Pipe DV Tool
3 432	9-5/8 36#/ft J 55 CSG
3 435	14 3/4" Hole
4 000	TOC
5 992'	DV Tool 2
5 984	Gap in Cmt 5 984 - 6 880
8 984'	DV Tool 1 (8 765 WL depth)
9 570'	Gap in Cmt 9,570 - 10 370'
11 012 (KB)	EOT
11 380	4 1/2" 11 6#/ft LS 110 CSG (FC @ 11 330)
11 400	7 7/8" Hole (Driller)

PBTD 11,307'
TD 11,400' (DL)

Updated 4/29/2008
Author aft
Engr TWG

BOPCO, L.P.
Rocky Mountain Div.

BOPCO L.P.

Yellow Creek Federal 4-16-1
SWSW Sec 4, T1S, R98W
Rio Blanco County, Colorado

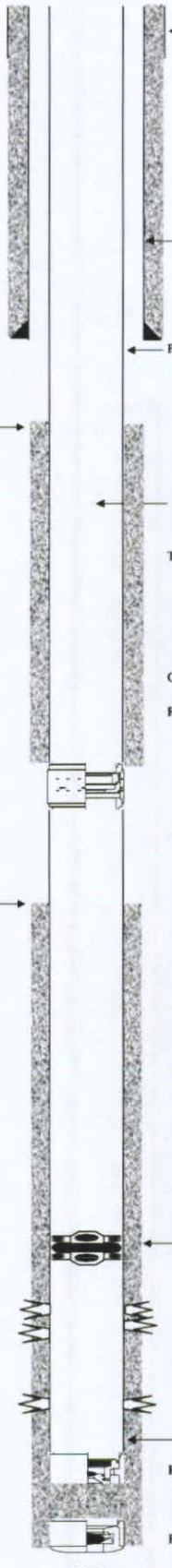
Wellbore Diagram not to scale

Prepared By: Harold Mayland
Date: 1/27/2009

ELEVATION
R.B. 6375'
G.L. 6,350
KB 25'
BHT

API No. 05-103-10404
COC 59393

Lat 39.98775
Long 108.4037



Conductor
20" x 76'

Existing

Surface Csg @ 3,432'

Hole size 14 3/4" hole
9 5/8" 36# J55 LT&C
Lead 440 sx Rockies LT 12.3 ppg 2.35 yield
Tail 425 sx Rockies LT 12.8 ppg 2.09 yield
Lead 650 sx Rockies LT 12.3 ppg 2.35 yield
Top out 350 sx Standard 14.5 ppg 1.41 yield

Production Csg. @ 11,380'

Hole size 7 7/8" hole
41/2" 11.6# LS-110 LT&C
1230 sx (3 stages)
Lead 430 sx Poz Prem 50/50 13.5 ppg 1.68 yield
Lead 155 sx HES LT Prem+ 2% Benonite 12.7 ppg 1.93 yield
Tail 350 sx Poz Prem 50/50 13.5 ppg 1.7 yield
Tail 295 sx Highbond 75+6% Bentonite 12.7 ppg 1.93 yield

TOC @ 4,150'

I.D.
Drift
Burst
Yield
BBL/FT
FT/BBL

TUBING
I.D.
Drift
Burst
Yield
BBL/FT
FT/BBL
Cap 4 1/2" x 2 7/8"
BBL/FT
FT/BBL

TOC @ 6,750'

Tubing estimated	Qty	Length	Depth in hole
KB		25.00	25.00
Slack off f/pkr			25.00
Tbg hanger			25.00
2 7/8" IJ tubing			25.00
2 7/8" X nipple			25.00
2 7/8" IJ tubing			25.00
2 7/8" XN nipple			25.00
2 7/8" IJ tubing			25.00
4 1/2 X 2 3/8" AS1 packer			25.00
Wireline entry guide			25.00
			25.00
			25.00
EOT			25.00

NOTE:

CIBP @ 10,595'

Upper Sego
10,616 - 10,758' 27 holes
1,008 gal 7% HCL
96,542# 40/70 Econoprop
4,176 bbls Slick water

Lower Sego 15 holes
10,950 - 10,992'
1,008 gal 7% HCL
44,004# 40/70 Econoprop
4,176 bbls Slick water

PBTD 11,307'

Float Collar

Float Shoe

11,400'
TD

ATTACHMENT NO. 7

ADVANCED CEMENT EVALUATION LOG

This log can be accessed at the COGCC:

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

A copy is also located at the Buys & Associates office:

300 E. Mineral Ave., Suite 10
Littleton, Colorado 80122

ATTACHMENT NO. 8

CHI PROCESSED TRIPLE COMBO LOG

This log can be accessed at the COGCC:

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

A copy is also located at the Buys & Associates office:

300 E. Mineral Ave., Suite 10
Littleton, Colorado 80122

ATTACHMENT NO. 9

LIST OF OWNERS AND AFFIDAVIT NOTIFICATION

YCF 4-16-1
Surface, Mineral and Lease Owners

Surface Ownership:

Township 1 South – Range 98 West

Section 4, 5 & 8:	All	BLM White River Field Office 220 E. Market Street Meeker, CO 81641
Section 9:	S ½, NW ¼, N ½ of NE ¼	BLM White River Field Office 220 E. Market Street Meeker, CO 81641

Mineral Ownership:

Township 1 North – Range 98 West

Section 4, 5 & 8:	All	BLM White River Field Office 220 E. Market Street Meeker, CO 81641
Section 9:	S ½, NW ¼, N ½ of NE ¼	BLM White River Field Office 220 E. Market Street Meeker, CO 81641

Working Interest Ownership:

Section 4 & 5:	All	Trent Green BOPCO, LP 9949 S. Oswego St., Suite 200 Parker, CO 80134
Section 8:	SE ¼, S ½ of SW ¼ E ½ of NE ¼	Exxon Mobil Corp. P.O. Box 4358 Houston, TX 77252
Section 8:	NW ¼, W ½ of NE ¼ N ½ of SW ¼	EnCana Oil & Gas (USA) Inc. 370 17th St #1700 Denver, CO 80202
Section 9:	S ½, NW ¼, N ½ of NE ¼	Exxon Mobil Corp. P.O. Box 4358 Houston, TX 77252
Section 10	Well - NRG 41-9-198	Williams Production RMT Company 1515 Arapahoe St, Tower 3, #1000 Denver, CO 80202

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.77

Postmark Here — LITTLETON CO 80129 — HERITAGE CLEANERS CPU

Exxon Mobil
800 Bell St
Houston, TX 77002

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Exxon Mobil
800 Bell St
Houston, TX 77002

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addres

B. Received by (Printed Name) | C. Date of Deliv
3/10/09

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

MAR 10 2009

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 0500 0000 1777 3870

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

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Return Receipt Fee (Endorsement Required)	2.20
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.77

Postmark Here — LITTLETON CO 80129 — HERITAGE CLEANERS CPU

EnCana Oil & Gas (USA) Inc.
370 17th Street, # 1700
Denver, CO 80202

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

EnCana Oil & Gas (USA) Inc.
370 17th Street, # 1700
Denver, CO 80202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☑ Addres

B. Received by (Printed Name) MAR 6 2009 | C. Date of Deliv

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

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 0500 0000 1777 3863

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

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Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	2.20
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.77

Postmark Here — LITTLETON CO 80129 — HERITAGE CLEANERS

Trent Green
BEPCO, LP
dba Bass Enterprises Production Co.
9949 Oswego Street, Suite 200
Parker, CO 80134

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Trent Green
BEPCO, LP
dba Bass Enterprises Production Co.
9949 Oswego Street, Suite 200
Parker, CO 80134

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☑ Addres

B. Received by (Printed Name) | C. Date of Deliv
3/6

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

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 0500 0000 1777 3887

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7008 0500 0000 1777 3900

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Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	2.20
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 9.70

Postmark Here — LITTLETON CO 80123 MAR 4 2009 — HERITAGE CLEANERS CPU

Sent To: Colorado Oil and Gas Conservation Commission
1120 Lincoln Street
Suite 801
Denver, Colorado 80203

PS Form ... Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street
Suite 801
Denver, Colorado 80203

COMPLETE THIS SECTION ON DELIVERY

A. Signature X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Christine Brookshire C. Date of Delivery 3,5,09

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

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 0500 0000 1777 3900

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

7008 0500 0000 1777 3856

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Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	2.20
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.77

Postmark Here — LITTLETON CO 80123 MAR 4 2009 — HERITAGE CLEANERS CPU

Sent To: Williams Production RMT Company
Street, Apt. No.; or PO Box No.: 1515 Arapahoe Street, Tower 3, #1000
City, State, ZIP+4: Denver, CO 80202

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Williams Production RMT Company
1515 Arapahoe Street, Tower 3, #1000
Denver, CO 80202

COMPLETE THIS SECTION ON DELIVERY

A. Signature X [signature] ☐ Agent ☐ Addressee

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

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

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

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 0500 0000 1777 3856

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

February 24, 2009

Mineral, Surface and Working Interest Owners

RE: Notification of Conversion to Water Injection

To Whom it May Concern;

On February 24, 2009, BOPCO, L.P. submitted to the Colorado Oil & Gas Conservation Commission an application requesting approval to convert the Yellow Creek Federal 4-16-1 to a water injection well for produced water from the Yellow Creek Unit.

Anyone who would be directly and adversely affected by the authorization of the underground disposal may file a written request for a public hearing before the COGCC. Logs and additional information on the subject well are on file with the COGCC, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203.

Please contact Marty Buys at 303.781.8211 if you have any questions.

Sincerely,

Martin W. Buys
Agent for BOPCO L.P.

Enclosure

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
COC59393

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
YELLOW CREEK FEDERAL 4-16-1

2. Name of Operator
BOPCO, L.P.

Contact: TRENT W GREEN
E-Mail: twgreen@basspet.com

9. API Well No.
05-103-10404

3a. Address
9949 SOUTH OSWEGO STREET
PARKER, CO 80134

3b. Phone No. (include area code)
Ph: 303-799-5080

10. Field and Pool, or Exploratory
YELLOW CREEK

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*

Sec 4 T1S R98W SWSW 798FSL 689FWL
39.98791 N Lat, 108.40302 W Lon

11. County or Parish, and State
RIO BLANCO COUNTY, CO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☒ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BOPCO, L.P. respectfully submits this Notice of Intent to convert the Yellow Creek Federal 4-16-1 to a water injection well for produced water from the Yellow Creek Unit. A copy of the Underground Injection Control permit application, as submitted to the Colorado Oil and Gas Conservation Commission on February 24, 2009, is attached for your information.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #67791 verified by the BLM Well Information System For BOPCO, L.P., sent to the Meeker

Name *(Printed/Typed)* MARTY BUYS — Title PRESIDENT

Signature (Electronic Submission) — Date 03/04/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

ATTACHMENT NO. 10a

PROPOSED INJECTION PROGRAM

BOPCO L.P.
Yellow Creek Federal 4-16-1
SWSW Sec 4, T1S, R 98W
API # 05-103-10404
Rio Blanco County, Colorado

GL: 6,361'; RKB: 6,385'; TD: 11,400'; PBTD: 11,307'

Surface casing: 9 5/8 36# J-55 LT&C @ 3,432' cement to surface

Production casing: 4 ½ 11.6# LS-110 LT&C @ 11,380'

Production tubing: None

Open perforations: None

Producing formation: None

Temporary Abandoned Formation:
Upper Sego 10,621' to 10,751'
Lower Sego 10,950' to 10,990'

Proposed work: Drill out CIBP & convert Upper/Lower Sego intervals to salt water disposal.

1. MIRU well service unit, pump and tank.
2. ND tree & NU BOPE.
3. Pick up 3 ¾" mill and 2 3/8" tubing. TIH to drill out cement and CIPB @ 10,595'. Clean out to 11,307'. Circulate out drilling fluids with 260 bbls produced water.
4. POOH laying down tubing.
5. MIRU perforators, re-perforate both Lower and Upper Sego intervals with 3 1/8 guns, 23 gram, 4 SPF, 90 degree phasing, 0.41 diameter entry holes. Correlate to Halliburton GR/CCL/CBL log dated 11-14-2007.

10,976 – 10,992'	**16'**	**64 holes**
10,947 - 10,954'	**7'**	**28 holes**
10,742 – 10,758'	**16'**	**64 holes**
10,713 – 10,716'	**3'**	**12 holes**
10,701 – 10,708'	**7'**	**28 holes**
10,697 – 10,699'	**2'**	**8 holes**
10,675 – 10,692'	**17'**	**68 holes**
10,644 – 10,651'	**7'**	**28 holes**
10,616 – 10,624'	**8'**	**32 holes**

6. RIH 2 3/8" X 6' nickel coated pup joint, 4 ½' nickel coated AS1 packer and nickel coated 2 7/8" IJ (3.22" OD, 2.44" ID) plastic coated tubing . Circulate packer fluid behind tubing. Set packer @ ± 10,600' and land tubing.
7. ND BOPE & NU tree.

8. Conduct MIT: Schedule MIT with state inspector. Pressure test casing annulus to minimum of 300 psi, maximum of 1,728 psi for 30 minutes, record (chart) test. Keep chart for submission to the COGCC on Form 21.

9. RDMO well service unit.

10. Set up production facilities.

    Production Facilities to include:

    a. 5 - 400 bbl frac tanks for temporary tankage for trucks to unload and buried Flexpipe flowline.

    b. Electric pump skid with natural gas generator (unit will have proper emission permits).

    c. Bypass assembly allowing fluid to return to tanks if injection pressure exceeds 1,728 psi (maximum allowed under UIC permit).

    d. Water meter, pressure recorder and associated transducers for SCADA system.

Proposed by:
Harold Mayland
01-27-09
Revised 02-18-09
Revised 02-24-09
Revised 02-25-09

ATTACHMENT NO. 10b

INJECTION WELLBORE DIAGRAM

BOPCO, L.P.

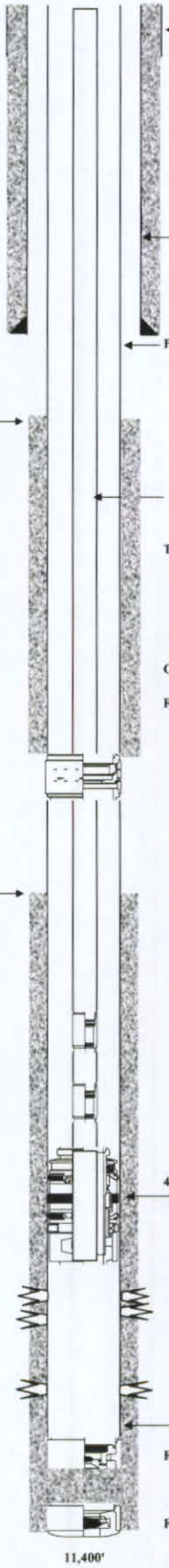
Rocky Mountain Div.

BOPCO L.P.

Yellow Creek Federal 4-16-1
SWSW Sec 4, T1S, R98W
Rio Blanco County, Colorado

Wellbore Diagram not to scale

Prepared By: Harold Mayland
Date: 1/27/2009



ELEVATION
R.B. 6375'
G.L. 6,350
KB 25'
BHT

API No. 05-103-10404
COC 59393

Lat 39.98775
Long 108.4037

Hole size 14 3/4" hole
9 5/8" 36# J55 LT&C
Lead 440 sx Rockies LT 12.3 ppg 2.35 yield
Tail 425 sx Rockies LT 12.8 ppg 2.09 yield
Lead 650 sx Rockies LT 12.3 ppg 2.35 yield
Top out 350 sx Standard 14.5 ppg 1.41 yield

Hole size 7 7/8" hole
41/2" 11.6# LS-110 LT&C
1230 sx (3 stages)
Lead 430 sx Poz Prem 50/50 13.5 ppg 1.68 yield
Lead 155 sx HES LT Prem+ 2% Benonite 12.7 ppg 1.93 yield
Tail 350 sx Poz Prem 50/50 13.5 ppg 1.7 yield
Tail 295 sx Highbond 75+6% Bentonite 12.7 ppg 1.93 yield

2 7/8" IJ

Tubing estimated	Qty	Length	Depth in hole
KB		25.00	25.00
Slack off f/pkr		-2.00	23.00
Tbg hanger		1.00	24.00
2 7/8" IJ tubing	328	10,500.00	10,524.00
2 7/8" X nipple		1.20	10,525.20
2 7/8" IJ tubing	1	32.00	10,557.20
2 7/8" XN nipple		1.20	10,558.40
2 7/8" IJ tubing	1	32.00	10,590.40
4 1/2 X 2 3/8" AS1 packer		6.00	10,596.40
Wireline entry guide		1.00	10,597.40
			10,597.40
			10,597.40
EOT			10,597.40

NOTE:
Tubing and packer are proposed for SDW injection
Propose to reperforate all of the existing Sego interval

Upper Sego
10,616 - 10,758' 27 holes
1,008 gal 7% HCL
96,542# 40/70 Econoprop
4,176 bbls Slick water

Lower Sego 15 holes
10,950 - 10,992'
1,008 gal 7% HCL
44,004# 40/70 Econoprop
4,176 bbls Slick water

ATTACHMENT NO. 10b

INJECTION WELLBORE DIAGRAM

BOPCO, L.P.

Rocky Mountain Div.

BOPCO L.P.

Yellow Creek Federal 4-16-1
SWSW Sec 4, T1S, R98W
Rio Blanco County, Colorado

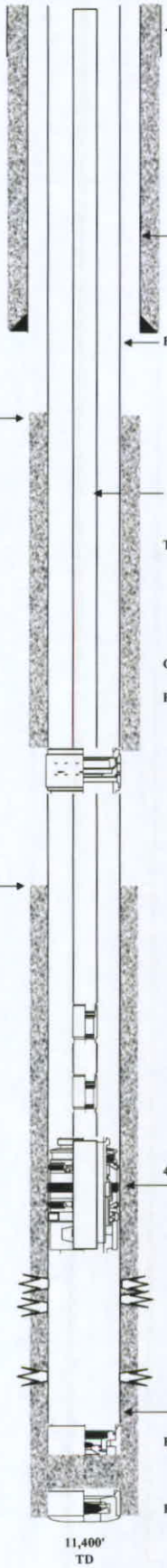
Wellbore Diagram not to scale

Prepared By: Harold Mayland
Date: 1/27/2009

ELEVATION
R.B. 6375'
G.L. 6,350
KB 25'
BHT

API No. 05-103-10404
COC 59393

Lat 39.98775
Long 108.4037



Hole size 14 3/4" hole
9 5/8" 36# J55 LT&C
Lead 440 sx Rockies LT 12.3 ppg 2.35 yield
Tail 425 sx Rockies LT 12.8 ppg 2.09 yield
Lead 650 sx Rockies LT 12.3 ppg 2.35 yield
Top out 350 sx Standard 14.5 ppg 1.41 yield

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Lead 430 sx Poz Prem 50/50 13.5 ppg 1.68 yield
Lead 155 sx HES LT Prem+ 2% Benonite 12.7 ppg 1.93 yield
Tail 350 sx Poz Prem 50/50 13.5 ppg 1.7 yield
Tail 295 sx Highbond 75+6% Bentonite 12.7 ppg 1.93 yield

2 7/8" IJ

Tubing estimated	Qty	Length	Depth in hole
KB		25.00	25.00
Slack off f/pkr		-2.00	23.00
Tbg hanger		1.00	24.00
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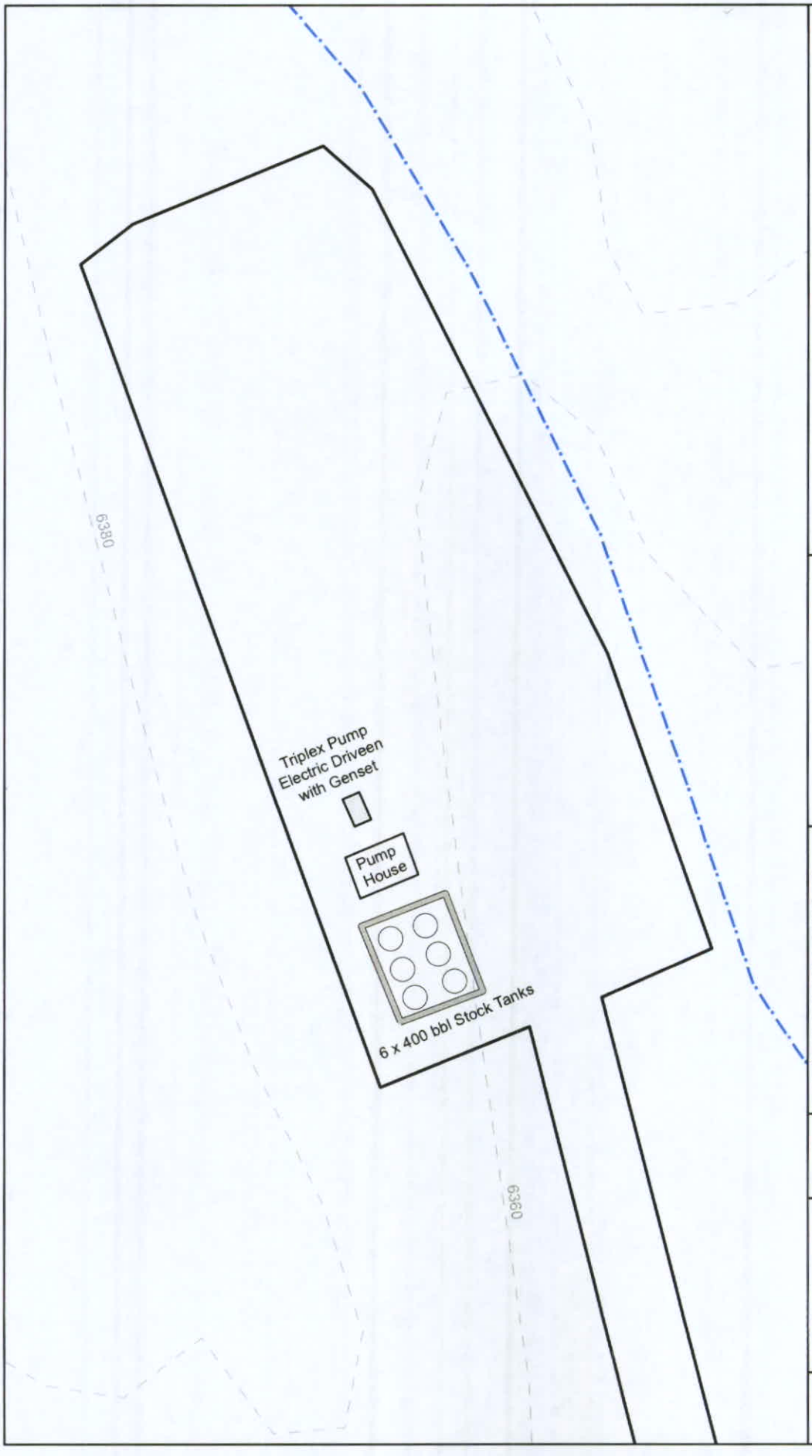
NOTE:
Tubing and packer are proposed for SDW injection
Propose to reperforate all of the existing Sego interval

Upper Sego
10,616 - 10,758' 27 holes
1,008 gal 7% HCL
96,542# 40/70 Econoprop
4,176 bbls Slick water

Lower Sego 15 holes
10,950 - 10,992'
1,008 gal 7% HCL
44,004# 40/70 Econoprop
4,176 bbls Slick water

ATTACHMENT NO. 10c

SURFACE CONFIGURATION



Legend

Pad Boundary

Stock Tanks

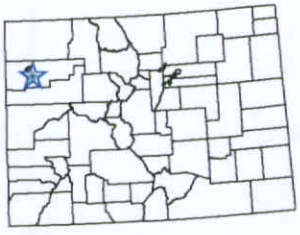
Berm

N
W
E
S

0 25 50 100

Feet

Project Location



Map Index

BOPCO, L.P.

Injection Configuration
YCF 4-16-1
Sec. 4, T1S, R98W
Rio Blanco County,
Colorado

Developed: 2/24/2009, L.H.

B&A Buys & Associates, Inc.
Environmental Consultants

ATTACHMENT NO. 11

P&A PROCEDURE

PLUG AND ABANDONMENT PROCEDURE

1. Obtain authorization from regulatory agencies for P&A procedures.

2. Rig up pulling unit. Install BOP. Release packers. Trip out of hole with production tubing string.

3. Set CIBP @ 10,550' and dump bail five sacks of Class G cement on top of plug (4 ½' casing) to isolate the Sego formation.

4. Cut off wellhead and install plate and identification P&A post marker. Weld to casing.

5. File reports with the agencies and reclaim surface location.

ATTACHMENT NO. 12

MIT PROCEDURE

Mechanical Integrity Test Procedure

Integrity testing can be accomplished by pressuring up the annulus between the casing and the tubing. Injection packer will be set approximately 100' above top of injection interval perforations (10,616' – 10,992'). The test will consist of pressuring the casing annulus to a minimum of 2225 psi (max requested surface injection pressure) and holding this pressure for 30 minutes (minimum of 15 minutes).

Test Procedure Details:

1. The Director of COGCC will be notified in writing no les than 10-days prior to the scheduled testing date.
2. MIRU Service Unit
3. Bleed off pressure, if any, on production casing.
4. ND wellhead and NU BOP.
5. Fill the tubing/casing annulus with a non-corrosive liquid 24 hours prior to the test.
6. Pressure up casing; tubing annulus to 2225 (max requested surface injection pressure) psi for 30 minutes (minimum of 15 minutes).
7. A pressure chart will be used to record the pressures throughout the test and submitted to Form 21.
8. If pressure holds, ND BOP and NU wellhead.
9. Return to injection.