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COG Operating, LLC

Application for Waterflood in the Yeso pool.

Texaco BE State #8

API# 30-015-35253

Section 16, Township 17S, Range 30E, Unit B

330' FNL & 2310' FEL

Eddy County, New Mexico

APPLICATION FOR AUTHORIZATION TO INJECT

PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No

II. OPERATOR: COG Operating, LLC

ADDRESS: 500 W Texas Ave, Suite 100, Midland, TX 79701

CONTACT PARTY: Kanicia Carrillo, Regulatory Analyst PHONE: 432-685-4332

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

IV. Is this an expansion of an existing project? _____ Yes _____ X No
If yes, give the Division order number authorizing the project: _____

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

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

VII. Attach data on the proposed operation, including:

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

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

IX. Describe the proposed stimulation program, if any.

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

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

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

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

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

NAME: Kanicia Carrillo TITLE: Regulatory Analyst

SIGNATURE: [Signature] DATE: 1/05/09

E-MAIL ADDRESS: kcarrillo@conchoresources.com

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

WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
- ☐ NSL ☐ NSP ☐ SD

Texaco BE #8
API# 30-015-35253

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
- ☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
- ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify Secondary Recovery ✓

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply
- [A] ☒ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☒ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

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

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

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

Anicia Carrillo
Print or Type Name

Signature

Regulatory Analyst
Title

1/20/10
Date

kcarrillo@conchoresources.com
e-mail Address

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Justification for Conversion to Injection

Concho Resources

Continental A State #11 (Sec 30 F, T-17S R-29E), Empire Field

Continental A State #12 (Sec 30 D, T-17S R-29E), Empire Field

Mesquite State #15 (Sec 20 L, T-17S R-29E), Empire East Field

Texaco BE #8 (Sec 16 B, T-17S, R-30E), Loco Hills Field

Eddy County, New Mexico

The purpose of converting each of these wells is to test the feasibility of secondary recovery operations in the Glorieta/Paddock and Blinebry intervals of the Yeso formation. The information obtained from these conversions may impact the potential recovery of secondary reserves in the Empire, Empire East, and Loco Hills fields in Eddy County, New Mexico. Data such as reservoir preferential permeability trends, injectivities into each interval, injection conformance, sweep efficiencies, and operating pressures may be incorporated into future studies concerning the feasibility of water flooding operations in the area.

Also attached are production plots of each proposed conversion with cumulative production listed from the Paddock interval.

OOIP & Recoverable Reserves

Original oil in place (OOIP) estimates have been made for each lease based on core and log based volumetric calculations. The local impact or sweep from each proposed conversion is estimated below:

Continental A State #11

- Paddock OOIP/acre 42 MBO
- Blinebry OOIP/acre 54 MBO
- Total OOIP/acre 96 MBO
- Estimated impacted area 5 acres
- Estimated recovery 5% of OOIP
- Total estimated oil recovery 24 MBO

Continental A State #12

- Paddock OOIP/acre 42 MBO
- Blinebry OOIP/acre 54 MBO
- Total OOIP/acre 96 MBO
- Estimated impacted area 5 acres
- Estimated recovery 5% of OOIP
- Total estimated oil recovery 24 MBO

Mesquite State #15

- Paddock OOIP/acre 53 MBO
- Blinebry OOIP/acre 58 MBO
- Total OOIP/acre 111 MBO
- Estimated impacted area 5 acres
- Estimated recovery 5% of OOIP
- Total estimated oil recovery 28 MBO

Texaco BE #8

- Paddock OOIP/acre 37 MBO
- Blinebry OOIP/acre 75 MBO
- Total OOIP/acre 112 MBO
- Estimated impacted area 5 acres
- Estimated recovery 5% of OOIP
- Total estimated oil recovery 28 MBO

Mobility Ratio Data

Core data is available from several sources in the Empire and Loco Hills fields. Most of the core data includes porosity, permeability, and saturation data from mainly the Paddock interval. The nearest known relative permeability data in the Paddock is from Concho operated Skelly Unit #971 in the Fren Field, Section 14 K, T-17S, R-31E. A plot of Kro & Krw data from six Paddock core samples is attached. The data indicates a mobility ratio (K_{rw}/K_{ro}) of 1 is reached at water saturations exceeding 43%. Favorable mobility ratios are expected if the Sw's are less than 43%. No known relative permeability data exists for the Blinebry.

Calculated water saturations are generally less than 40% in the Paddock and Blinebry. It is expected that injection into this interval will sweep oil and not cause a harmful effect on surrounding production.

Successful secondary recovery will prevent waste of New Mexico's natural resources and contribute to local, state, and federal budget incomes.

Other Productive Zones

Productive intervals exist both above and below the Yeso formation. Attached is a tabulation of nearby wells and their completion zones. Below is a summary of shallow and deep wells around the proposed conversion:

Texaco BE #8

- Shallow productive horizons include the Seven Rivers-Queen-Grayburg-San Andres (1,500'-4,000').

Reservoir Bottom Hole Pressure Data

In December, 2009, each well was shut in for 24 hours and the fluid level was shot with a sonic gun. Shut in bottom hole pressure data is attached and summarized below:

Continental A State #11

- 24 Hr SIBHP=273 PSIG

Continental A State #12

- 24 Hr SIBHP=498 PSIG

Mesquite State #15

- 24 Hr SIBHP=601 PSIG

Texaco BE #8

- 24 Hr SIBHP=388 PSIG

Maximum Permitted Injection Pressure

Concho is asking for a maximum injection permit higher than the normal 0.2 PSI/Ft gradient because the Blinbry is usually tighter than the Paddock. Very little history of injection exists in the Blinbry. A well chronology listing the acid and frac treatments for the completion is attached. For the Texaco B #8, the 15 min after frac ISIP varied from 1,480 PSIG in the Upper Blinbry to 1,597 PSIG in the Lower Blinbry. The 15 min after frac ISIP in the Paddock was 1,353 PSIG.

Notifications

In addition to publication in the Artesia Daily Press, notifications were sent to the following:

- Offset Operators—Cimarex
- WIO in COG's offsetting tracts—Chevron
- Leasehold—BLM and State Land Office

Rate/TIME Graph

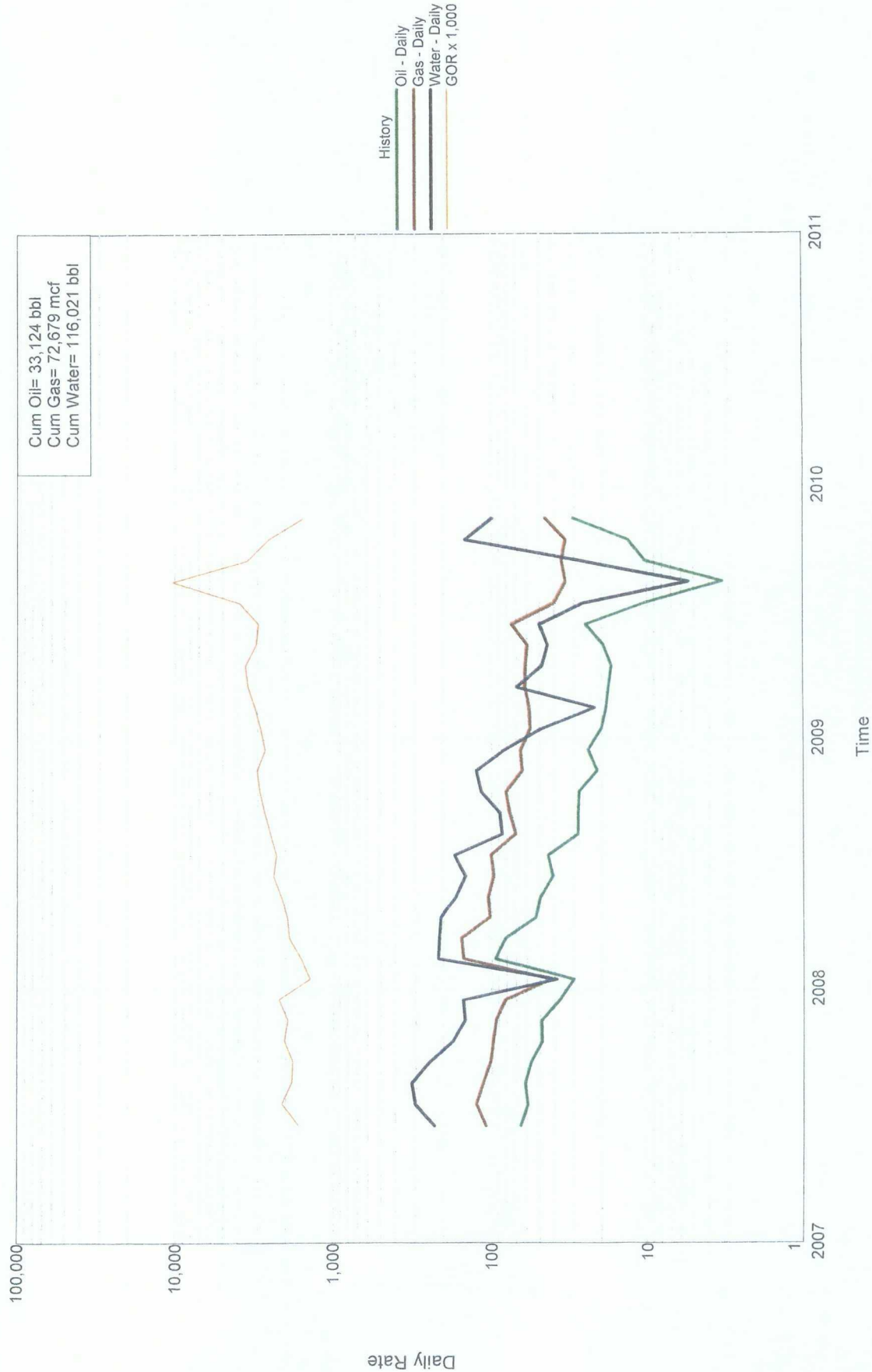
Lease Name: TEXACO BE (8)
County, ST: EDDY, NM
Location: 16B 17S 30E NW NW NE

Project: u:\power tools\projec_rock\loco hills area 1.mdb

Date: 12/18/2011
Time: 1:50 PM

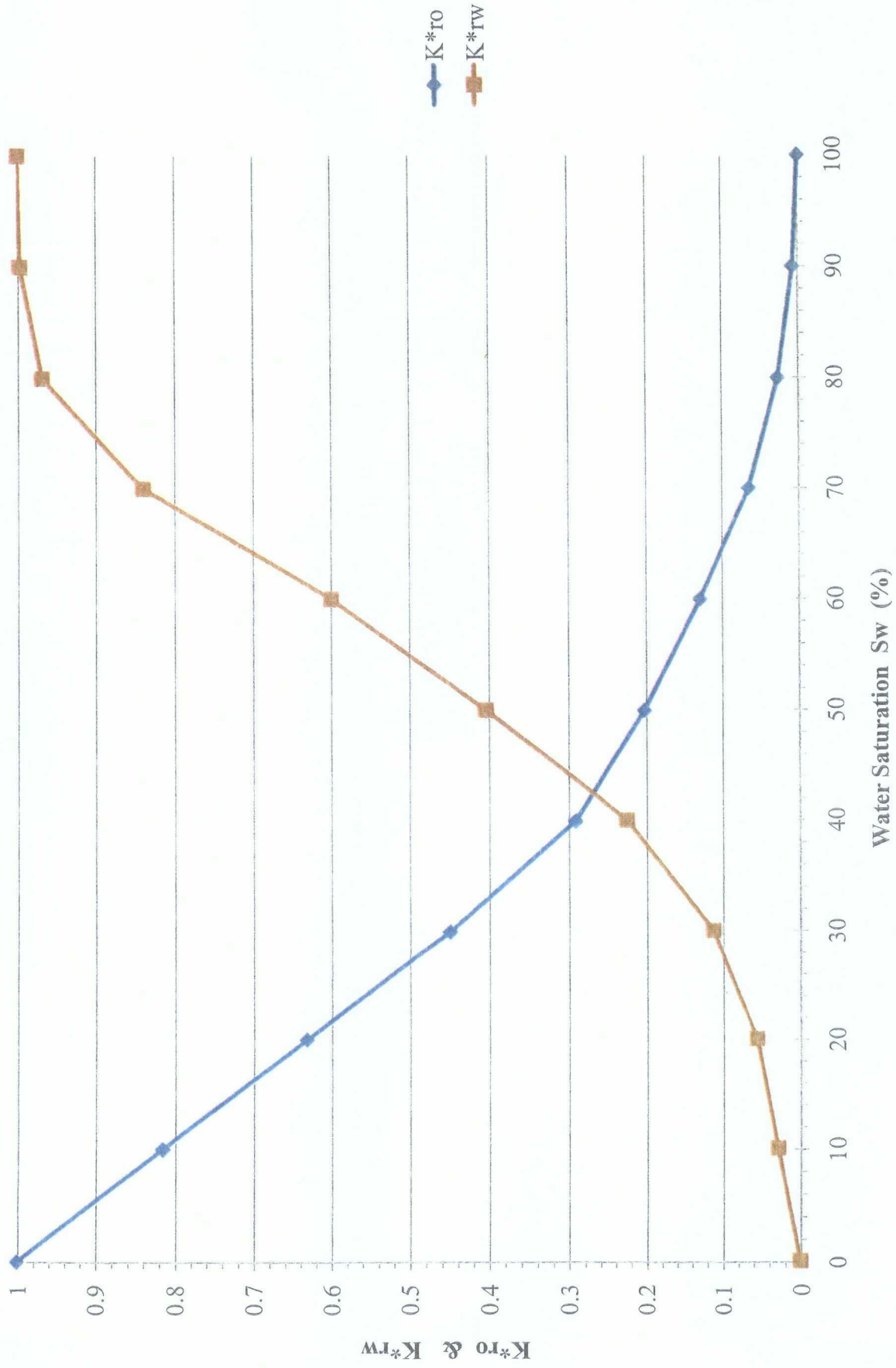
Operator: COG OPERATING LIMITED LIABILITY CORP
Field Name: LOCO HILLS

COG OPERATING LIMITED LIABILITY CORP TEXACO BE (8) 8 LOCO HILLS GLORIETA YESO EDDY NM 16B 17S 30E NW NW NE



Skelly 971 Relative Perm Plot

6 CORE PADDOCK AVG. NORMALIZED REL. PERM.
COG SKELLY 971, SEC 14-K, T 17S R-31-E
EDDY COUNTY, NM



Texaco BE #8 24 Hr SIBHP 12-09

WELL NAME:		Texaco BE#8	TOTAL GASEOUS COLUMN:				
CSG PRESSURE:		109.3	SPM	STROKE	Pump SQ	Factor	100%
FEET TO FLUID:		5125				0.1166	0
JTS TO FLUID:			Oil	gas	Water	Fluid	100%
GAS FREE LIQUID:							#DIV/0!
COMMENTS:		SBHP 388.2 24hr shut in					
REMARKS:							

III. Well Data

COG Operating, LLC
Texaco BE #8
API# 30-015-35767
Sec 16, T17S, R30E, Unit B
330' FNL & 2310' FEL
Eddy County, NM

Tubing Size: 2-7/8" Lining Material: IPC

Type of Packer: Tandem Packers with Flow Regulators

Packer Setting Depth: 4267' & 4822'

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

Additional Data

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

If no, for what purpose was the well originally drilled? Producing oil well.

2. Name of the Injection Formation: Paddock 4367' - 4681', Blinbry 4922' - 5721'

3. Name of Field or Pool (if applicable): Loco Hills; Glorieta, Yeso, 96718

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

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: 7 Rivers, Queen, Grayburg-San Andres 1500'-4000'

COG OPERATING LLC

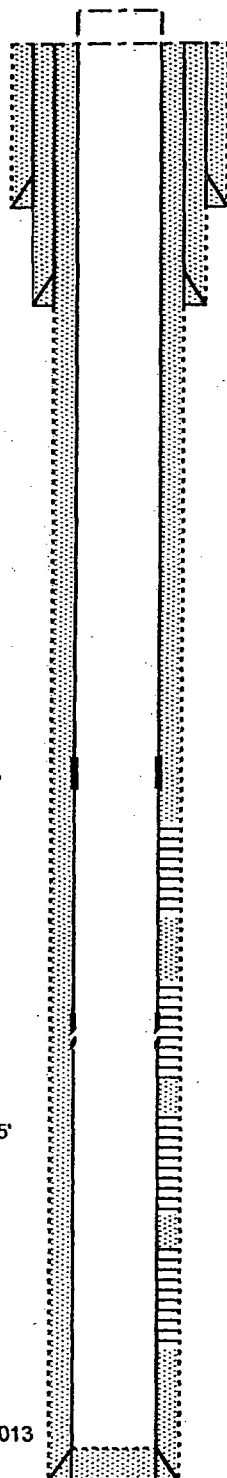
Lease & Well #
API# 30-015-35253

Texaco BE #8

Eddy Co., NM

Sec 16 B T17S R30E 330 FNL & 2310 FEL
KB

Elevation GL - 3680



13 3/8" 48# H-40 STC csg @ 413', 480 sx.
Circ 20 sx

8 5/8" 32# J-55 Stc @ 1365', 600 sx, circ. 150 sx.

1/18/2008
Tubing: 149 jts 2 7/8" J-55 EUE 8rd
TAC @ 4726'
31 jts 2 7/8"
1 jt 2 7/8" Endurance tbg
SN @ 5739'
4' PS
1- 2 7/8" mud jt w/bp
Rods: 2', 4'- 7/8" ponies, + 1 1/4" x 26' PR
78- 7/8" T-66
148 Weatherford T-66 3/4"
12- 7/8" T-66
2'- 7/8" pony
Pump: 2.5 x 2 x20' RHTC w/6' gas anchor.

DV tool -3918

Paddock

4367 4367 - 4681', 1 spf, 32 holes
Acidized w/3000 gal,
4681 frac w/126,300 gal 30/40# LG, 81,395# prop.

Blinbry

4922 4922 - 5205', 2spf, 66 holes
Acidized w/2500 gal,
5205 frac w/99,334 gal 30/40# LG, 97,821# prop.

Marker jt @ 5135'

5310 5310 - 5470, 2 spf, 60 holes
Acidized w/1850 gal,
5470 frac w/92,577 gal 30/40# LG, 96,532 # prop.

5576 5576 - 5721, 2 spf, 50 holes
Acidize w/2500 gal,
5721 frac w/90,400 gal 30/40# LG*, 97,800# prop.

PBTD - 6013

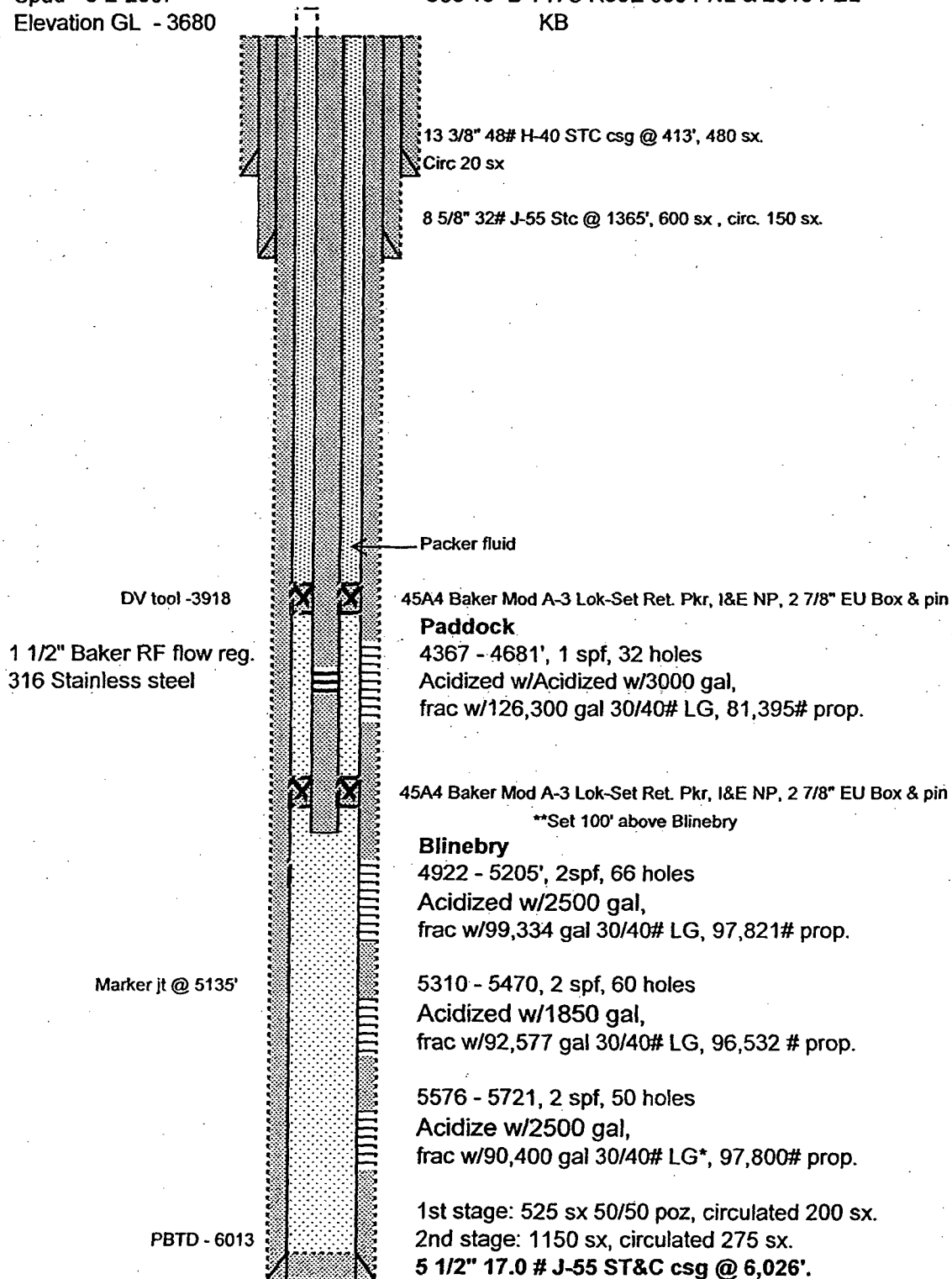
1st stage: 525 sx 50/50 poz, circulated 200 sx.
2nd stage: 1150 sx, circulated 275 sx.
5 1/2" 17.0 # J-55 ST&C csg @ 6,026'.

COG OPERATING LLC

Lease & Well #
 API # 30-015-35253
 Spud - 5-2-2007
 Elevation GL - 3680

Texaco BE #8

Eddy Co., NM
 Sec 16 B T17S R30E 330 FNL & 2310 FEL
 KB



5-1/2" RETRIEVAL INJECTION SYSTEM

CUSTOMER: COS OPERATING, LLC

COUNTRY: USA

FIELD: HA

QUOTATION NO. JH10010003, COWELL NO. GC FED VARIOUS

DRAWING NO. 5.5_RF_Regulators_COG_GC Federal_Project.dwg

APPROVED BY: ERIC MCCLUSKY

DRAWN BY: JAY HARDESTY

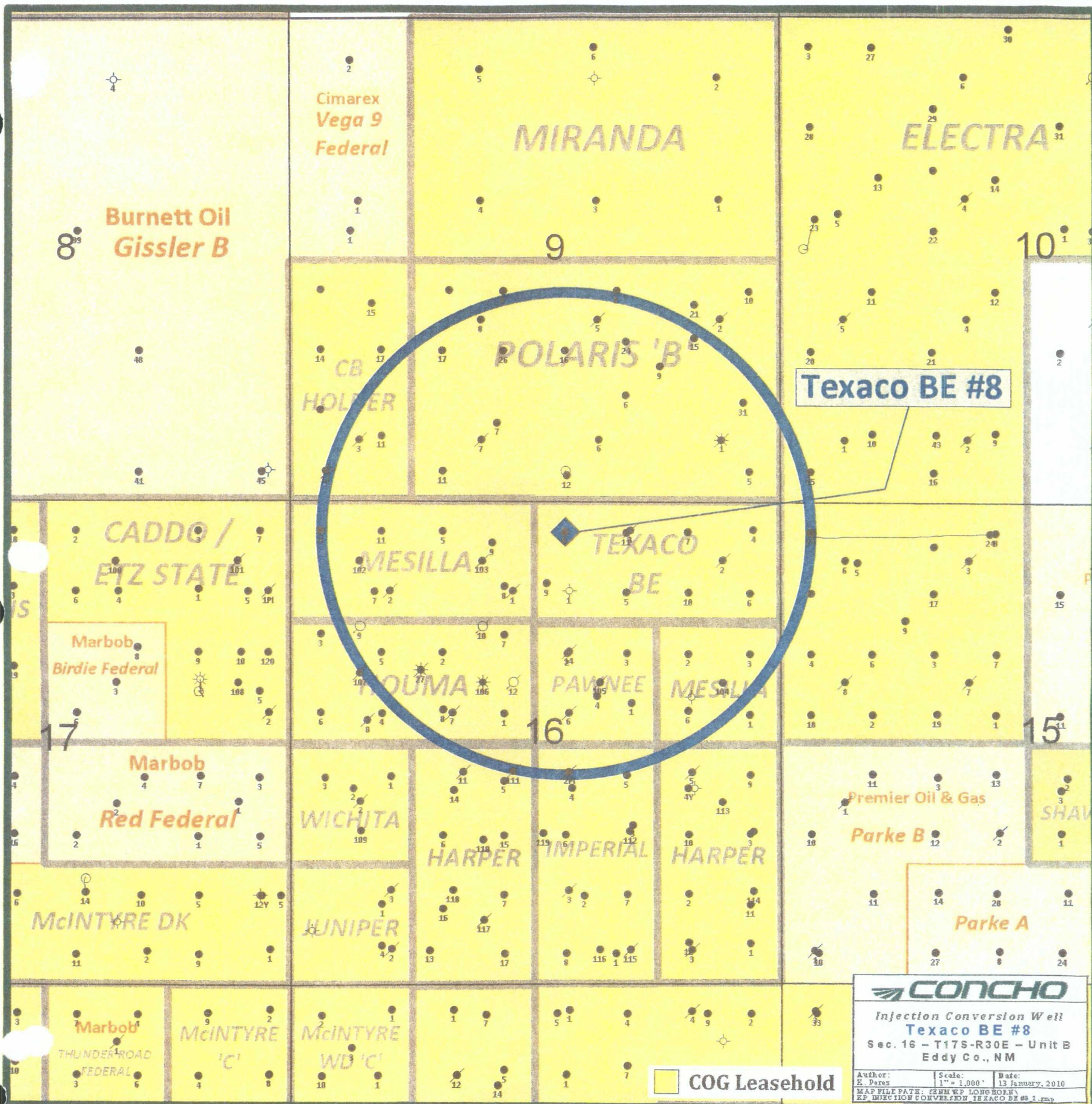
DATE: 01-07-09

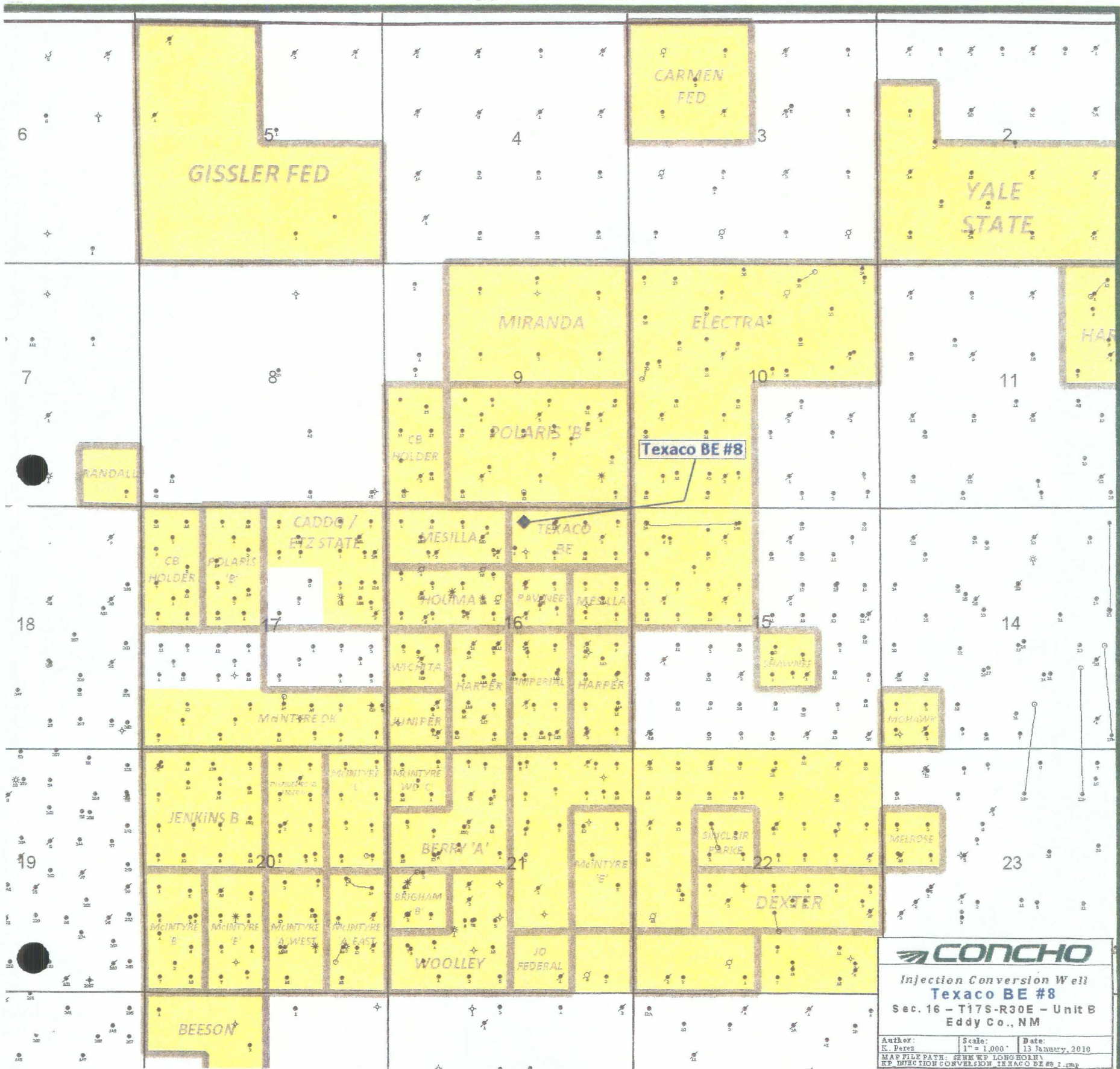


Baker Oil Tools

Horizontal Illustration
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MAX. O.D.	MIN. I.D.	WELL SCHEMATIC	DESCRIPTION	LENGTH	DEPTH
			1 TUBING HANGER SIZE: THREADS: MATERIAL: PRODUCT FAMILYH		
3.668"	2.441"		3 INTERNALLY PLASTIC COATED INJECTION LINE SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH		
4.763"	2.000"		4 MODEL C-1 TANDEM TENSION PACKER WITH UHL QADER SIZE: 45A4 THREADS: 2-3/8" 4.7 LBS/FT EUE MATERIAL: 316 STAINLESS STEEL PRODUCT FAMILYH00226/		
3.668"	2.441"		5 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
4.760"	1.995"		6 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" RF FLOW REGULATOR, I & E ENP, 316 SS RCLATCH AND RF REGULATOR SIZE: 2-3/8" THREADS: 2-3/8" 4.7 LBS/FT EU BOX X PIN MATERIAL: J-55 PRODUCT FAMILYH		
3.668"	2.441"		7 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
4.641"	1.988"		8 MODEL A-3 LOK-SET RETRIEVABLE CASING PAC KKR SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: P-110 PRODUCT FAMILYH064630/		
3.668"	2.441"		9 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
4.760"	1.995"		10 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" RF FLOW REGULATOR, I & E ENP, 316 SS RCLATCH AND RF REGULATOR SIZE: 2-3/8" THREADS: 2-3/8" 4.7 LBS/FT EU BOX X PIN MATERIAL: J-55 PRODUCT FAMILYH		
			12 BULL PLUG SIZE: 2-7/8" THREADS: MATERIAL: PRODUCT FAMILYH46950/		





Texaco BE 8 Wells by Sec

API Number	Operator Current Name	Lease Name	Well #	Sec Number	Unit	Township Direction	T	Range Direction	R	Footage		Footage		East West Start Line	Depth Total Driller
										North	South	North	South		
30015205370001	CBS OPERATING CORP	LOCO HILLS 'B' FED	1	9	P	S	17	E	30	660	660	FSL	FSL	FEL	2862
30015206170000	CBS OPERATING CORP	LOCO HILLS 'B' FED	2	9	I	S	17	E	30	1980	1980	FSL	FSL	FEL	2878
30015206720000	CBS OPERATING CORP	LOCO HILLS 'B' FED	5	9	J	S	17	E	30	1980	1980	FSL	FSL	FEL	2869
30015206730000	CBS OPERATING CORP	LOCO HILLS 'B' FED	6	9	O	S	17	E	30	660	660	FSL	FSL	FEL	2869
30015206740000	CBS OPERATING CORP	LOCO HILLS 'B' FED	7	9	N	S	17	E	30	660	660	FSL	FSL	FEL	2869
30015206750000	CBS OPERATING CORP	LOCO HILLS 'B' FED	8	9	K	S	17	E	30	1460	1460	FSL	FSL	FEL	3040
30015251100000	CBS OPERATING CORP	LOCO HILLS 'B' FED	9	9	J	S	17	E	30	805	805	FSL	FSL	FEL	11650
30015358230000	CIMAREX ENERGY OF CO	STEWART 9 FEDERAL COM	1	9	O	S	17	E	30	715	715	FSL	FSL	FEL	5896
30015354710000	COG OPERATING LLC	HOLDER CB FEDERAL	11	9	M	S	17	E	30	330	330	FSL	FSL	FEL	5917
30015359630000	COG OPERATING LLC	HOLDER CB FEDERAL	13	9	M	S	17	E	30	1650	1650	FSL	FSL	FEL	6004
30015366680000	COG OPERATING LLC	HOLDER CB FEDERAL	17	9	L	S	17	E	30	990	990	FSL	FSL	FEL	6000
30015366690000	COG OPERATING LLC	HOLDER CB FEDERAL	18	9	M	S	17	E	30	330	330	FSL	FSL	FEL	5985
30015347070000	COG OPERATING LLC	POLARIS B FEDERAL	5	9	P	S	17	E	30	1156	1156	FSL	FSL	FEL	5970
30015356490000	COG OPERATING LLC	POLARIS B FEDERAL	6	9	O	S	17	E	30	860	860	FSL	FSL	FEL	6020
30015356990000	COG OPERATING LLC	POLARIS B FEDERAL	7	9	N	S	17	E	30	2310	2310	FSL	FSL	FEL	5970
30015353930000	COG OPERATING LLC	POLARIS B FEDERAL	8	9	K	S	17	E	30	2310	2310	FSL	FSL	FEL	6007
30015353940000	COG OPERATING LLC	POLARIS B FEDERAL	9	9	J	S	17	E	30	330	330	FSL	FSL	FEL	6015
30015353960000	COG OPERATING LLC	POLARIS B FEDERAL	11	9	N	S	17	E	30	1650	1650	FSL	FSL	FEL	5920
30015353970000	COG OPERATING LLC	POLARIS B FEDERAL	12	9	O	S	17	E	30	1600	1600	FSL	FSL	FEL	6010
30015359270000	COG OPERATING LLC	POLARIS B FEDERAL	16	9	O	S	17	E	30	1750	1750	FSL	FSL	FEL	6005
30015359270000	COG OPERATING LLC	POLARIS B FEDERAL	17	9	K	S	17	E	30	2310	2310	FSL	FSL	FEL	6012
30015359320000	COG OPERATING LLC	POLARIS B FEDERAL	21	9	I	S	17	E	30	790	790	FSL	FSL	FEL	6007
30015367070000	COG OPERATING LLC	POLARIS B FEDERAL	24	9	J	S	17	E	30	1090	1090	FSL	FSL	FEL	6006
30015367100000	COG OPERATING LLC	POLARIS B FEDERAL	25	9	K	S	17	E	30	660	660	FSL	FSL	FEL	3475
30015367120000	COG OPERATING LLC	POLARIS B FEDERAL	26	9	K	S	17	E	30	660	660	FSL	FSL	FEL	3355
30015367120000	COG OPERATING LLC	POLARIS B FEDERAL	27	9	N	S	17	E	30	330	330	FSL	FSL	FEL	5925
30015366660000	COG OPERATING LLC	POLARIS B FEDERAL	31	9	P	S	17	E	30	660	660	FSL	FSL	FEL	2865
30015366630000	COG OPERATING LLC	POLARIS B FEDERAL	3	9	M	S	17	E	30	330	330	FSL	FSL	FEL	2846
30015207350000	GULF OIL CORP	HOLDER FED NCT-B	1	9	M	S	17	E	30	660	660	FSL	FSL	FEL	2865
30015041140000	WELCH THOMAS F	GULF	1	10	M	S	17	E	30	330	330	FSL	FSL	FEL	3525
30015204790001	CBS OPERATING CORP	LOCO HILLS FEDERAL 'A'	1	10	M	S	17	E	30	660	660	FSL	FSL	FEL	4947
30015354300000	COG OPERATING LLC	ELECTRA FEDERAL	15	10	M	S	17	E	30	330	330	FSL	FSL	FEL	6009
30015206110000	CBS OPERATING CORP	LOCO HILLS 'A' FED	6	15	D	S	17	E	30	660	660	FSL	FSL	FEL	9600
30015206160000	CBS OPERATING CORP	LOCO HILLS 'A' FED	8	15	E	S	17	E	30	1980	1980	FNL	FNL	FEL	6002
30015206110001	CBS OPERATING CORP	LOCO HILLS 'A' FEDERAL	WL-6	15	D	S	17	E	30	660	660	FNL	FNL	FEL	2100
30015206110002	CBS OPERATING CORP	LOCO HILLS 'A'	6	15	D	S	17	E	30	660	660	FNL	FNL	FEL	
30015317760000	COG OPERATING LLC	ELECTRA FEDERAL	4	15	E	S	17	E	30	1650	1650	FNL	FNL	FEL	
30015357830000	COG OPERATING LLC	ELECTRA FEDERAL	18	15	E	S	17	E	30	2310	2310	FNL	FNL	FEL	
30015362720101	COG OPERATING LLC	ELECTRA FEDERAL	24	15	D	S	17	E	30	330	330	FNL	FNL	FEL	
30015370820000	COG OPERATING LLC	ELECTRA FEDERAL	39	15	D	S	17	E	30	990	990	FNL	FNL	FEL	
30015221540001	COG OPERATING LLC	ETZ 'C' STATE	27	16	E	S	17	E	30	1850	1850	FNL	FNL	FEL	

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API Number	Operator Current Name	Lease Name	Well #	Sec Number	Unit	Township Direction	T	Range Direction	R	Footage North South	Footage North South Start Line	Footage East West	East West Start Line	Depth Total Driller
30015206840000	COG OPERATING LLC	ETZ STATE UNIT	102	16	D	S	17	E	30	660	FNL	660	FNL	3950
30015206870000	COG OPERATING LLC	ETZ STATE UNIT	104	16	H	S	17	E	30	1980	FNL	660	FEL	4090
30015106080000	COG OPERATING LLC	ETZ STATE	11	16	K	S	17	E	30	2310	FSL	1770	FNL	2093
30015207470000	COG OPERATING LLC	ETZ STATE	24	16	K	S	17	E	30	2310	FSL	2310	FNL	4050
30015041730000	COG OPERATING LLC	ETZ STATE B	6	16	G	S	17	E	30	2310	FNL	2310	FEL	2095
30015201350000	COG OPERATING LLC	ETZ STATE B	14	16	G	S	17	E	30	1650	FNL	2310	FEL	2106
30015203410000	COG OPERATING LLC	ETZ STATE C	18	16	G	S	17	E	30	1980	FNL	1980	FEL	4050
30015041740000	COG OPERATING LLC	ETZ STATE C	7	16	F	S	17	E	30	2310	FNL	1650	FNL	2109
30015041750000	COG OPERATING LLC	ETZ STATE C	8	16	E	S	17	E	30	2400	FNL	740	FNL	2082
30015104970000	COG OPERATING LLC	ETZ STATE C	W110	16	F	S	17	E	30	1370	FNL	1980	FNL	2095
30015201210000	COG OPERATING LLC	ETZ STATE C	W112	16	F	S	17	E	30	1980	FNL	2310	FNL	2100
30015104960000	COG OPERATING LLC	ETZ STATE C	W19	16	E	S	17	E	30	1370	FNL	660	FNL	2088
30015041760000	COG OPERATING LLC	ETZ STATE J	2	16	J	S	17	E	30	2310	FSL	2310	FEL	2095
30015100460001	COG OPERATING LLC	ETZ STATE UNIT	106	16	F	S	17	E	30	1980	FNL	1980	FNL	11300
30015205510000	COG OPERATING LLC	HOUMA STATE	107	16	E	S	17	E	30	1880	FNL	660	FNL	3950
30015314910000	COG OPERATING LLC	HOUMA STATE	1	16	F	S	17	E	30	2310	FNL	2310	FNL	4865
30015315780000	COG OPERATING LLC	HOUMA STATE	2	16	F	S	17	E	30	1650	FNL	1650	FNL	5960
30015352560000	COG OPERATING LLC	HOUMA STATE	3	16	E	S	17	E	30	1450	FNL	330	FNL	6035
30015357670000	COG OPERATING LLC	HOUMA STATE	4	16	E	S	17	E	30	2310	FNL	990	FNL	5914
30015364940000	COG OPERATING LLC	HOUMA STATE	5	16	E	S	17	E	30	1650	FNL	990	FNL	6008
30015364950000	COG OPERATING LLC	HOUMA STATE	6	16	E	S	17	E	30	2310	FNL	330	FNL	6018
30015364960000	COG OPERATING LLC	HOUMA STATE	7	16	F	S	17	E	30	1450	FNL	2310	FNL	6008
30015364770000	COG OPERATING LLC	HOUMA STATE	8	16	F	S	17	E	30	2185	FSL	2310	FEL	4885
30015310190000	COG OPERATING LLC	IMPERIAL STATE	4	16	J	S	17	E	30	2310	FSL	1650	FEL	5970
30015348660000	COG OPERATING LLC	IMPERIAL STATE	5	16	J	S	17	E	30	2310	FNL	330	FEL	4850
30015313670000	COG OPERATING LLC	MESILLA STATE	1	16	H	S	17	E	30	1650	FNL	990	FEL	4925
30015313660000	COG OPERATING LLC	MESILLA STATE	2	16	H	S	17	E	30	1650	FNL	330	FEL	5980
30015345380000	COG OPERATING LLC	MESILLA STATE	3	16	H	S	17	E	30	330	FNL	330	FNL	6020
30015352550000	COG OPERATING LLC	MESILLA STATE	4	16	D	S	17	E	30	330	FNL	1650	FNL	6025
30015352540000	COG OPERATING LLC	MESILLA STATE	5	16	C	S	17	E	30	2270	FNL	990	FEL	5910
30015357660000	COG OPERATING LLC	MESILLA STATE	6	16	H	S	17	E	30	990	FNL	915	FNL	5906
30015357640000	COG OPERATING LLC	MESILLA STATE	7	16	D	S	17	E	30	915	FNL	2310	FNL	5921
30015357650000	COG OPERATING LLC	MESILLA STATE	8	16	C	S	17	E	30	455	FNL	2180	FNL	5950
30015364870000	COG OPERATING LLC	MESILLA STATE	9	16	C	S	17	E	30	1290	FNL	1440	FNL	6010
30015364910000	COG OPERATING LLC	MESILLA STATE	10	16	F	S	17	E	30	330	FNL	990	FNL	5960
30015364920000	COG OPERATING LLC	MESILLA STATE	11	16	D	S	17	E	30	2185	FNL	1600	FEL	4860
30015305910000	COG OPERATING LLC	PAWNEE STATE	1	16	G	S	17	E	30	1650	FNL	2290	FEL	4855
30015313680000	COG OPERATING LLC	PAWNEE STATE	2	16	G	S	17	E	30	1650	FNL	1650	FEL	6020
30015348830000	COG OPERATING LLC	PAWNEE STATE	3	16	G	S	17	E	30	2115	FNL	1970	FEL	6080
30015348840000	COG OPERATING LLC	PAWNEE STATE	4	16	G	S	17	E	30	990	FNL	2310	FNL	2097
30015041770000	COG OPERATING LLC	RANDEL STATE	1	16	C	S	17	E	30	990	FNL	990	FNL	2100
30015041780000	COG OPERATING LLC	RANDEL STATE	2	16	D	S	17	E	30	660	FNL	1980	FNL	3947
30015205500000	COG OPERATING LLC	RANDEL STATE	3	16	C	S	17	E	30	330	FNL	1650	FEL	5530
30015261100000	COG OPERATING LLC	TEXACO 'BE'	3	16	B	S	17	E	30	990	FNL	1650	FEL	4824
30015315830000	COG OPERATING LLC	TEXACO 'BE'	5	16	B	S	17	E	30	990	FNL	1650	FEL	4824

API Number	Operator Current Name	Lease Name	Well #	Sec Number	Unit	Township Direction	T	Range Direction	R	Footage North South	Footage North South Start Line	Footage East West	East West Start Line	Depth Total	Driller
30015315850000	COG OPERATING LLC	TEXACO BE	6	16	A	S	17	E	30	990	FNL	330	FEL	4913	
30015262330001	COG OPERATING LLC	TEXACO BE	4	16	A	S	17	E	30	330	FNL	330	FEL	5906	
30015345390000	COG OPERATING LLC	TEXACO BE	7	16	A	S	17	E	30	330	FNL	990	FEL	6600	
30015352530000	COG OPERATING LLC	TEXACO BE	8	16	B	S	17	E	30	330	FNL	2310	FEL	6030	
30015363520000	COG OPERATING LLC	TEXACO BE	9	16	B	S	17	E	30	890	FNL	2510	FEL	6031	
30015363530000	COG OPERATING LLC	TEXACO BE	10	16	A	S	17	E	30	990	FNL	990	FEL	6030	
30015364880000	COG OPERATING LLC	TEXACO BE	11	16	B	S	17	E	30	340	FNL	1650	FEL	6022	
30015041690002	MACK ENERGY CORP	ETZ-STATE	5	16	I	S	17	E	30	2310	FSL	990	FEL	3417	
30015207640000	MACK ENERGY CORP	STATE BE	2	16	A	S	17	E	30	660	FNL	660	FEL	3950	
30015041800000	RANDEL OH	STATE	1	16	H	S	17	E	30	2140	FNL	990	FEL	2150	
30015041810000	TIDEWATER OIL CO	STATE I	1	16	B	S	17	E	30	990	FNL	2310	FEL	2103	

Total Wells Penetrating the Injection Interval		59										
Total P&A'd Wells Penetrating the Injection Interval		1										
API Number	Operator	Current Name	Lease Name	Well #	Field Name	State Name	County Name	Formation	Producing Name	Date Spud	Date Completion	
30015203370001	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	1	GRAYBURG JACKSON	NEW MEXICO	EDDY		SEVEN RIVERS	6/25/1972	7/23/1972	
30015206170000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	2	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	5/18/1972	6/11/1972	
30015206720000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	5	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	6/19/1972	7/4/1972	
30015206730000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	6	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	6/27/1972	7/11/1972	
30015206740000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	7	GRAYBURG JACKSON	NEW MEXICO	EDDY		QUEEN / GRAYBUR	7/3/1972	7/20/1972	
30015206750000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	8	FREN	NEW MEXICO	EDDY		SEVEN RIVERS	7/10/1972	8/5/1972	
30015251100000	CBS OPERATING CORP	LOCO HILLS 'B' FED	LOCO HILLS 'B' FED	9	GRAYBURG JACKSON	NEW MEXICO	EDDY		LOCO HILLS	12/20/1984	1/23/1985	
30015358230000	CIMAREX ENERGY OF CO	STEWART 9 FEDERAL COM	STEWART 9 FEDERAL COM	1	LOCO HILLS	NEW MEXICO	EDDY		MORROW	NOT DRILLED YET		
300153584710000	COG OPERATING LLC	HOLDER CB FEDERAL	HOLDER CB FEDERAL	11	LOCO HILLS	NEW MEXICO	EDDY		YESO	8/7/2007	9/20/2007	
30015359630000	COG OPERATING LLC	HOLDER CB FEDERAL	HOLDER CB FEDERAL	13	LOCO HILLS	NEW MEXICO	EDDY		YESO	6/26/2008	8/5/2008	
30015366680000	COG OPERATING LLC	HOLDER CB FEDERAL	HOLDER CB FEDERAL	17	LOCO HILLS	NEW MEXICO	EDDY		YESO	7/20/2009	8/25/2009	
30015366690000	COG OPERATING LLC	HOLDER CB FEDERAL	HOLDER CB FEDERAL	18	LOCO HILLS	NEW MEXICO	EDDY		YESO	11/9/2009		
30015347070000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	5	LOCO HILLS	NEW MEXICO	EDDY		YESO	10/6/2006	11/28/2006	
30015356490000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	6	LOCO HILLS	NEW MEXICO	EDDY		YESO	8/6/2007	11/13/2007	
30015356990000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	7	LOCO HILLS	NEW MEXICO	EDDY		YESO	12/22/2007	2/6/2008	
30015353930000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	8	LOCO HILLS	NEW MEXICO	EDDY		YESO	8/5/2007	9/22/2007	
30015353940000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	9	LOCO HILLS	NEW MEXICO	EDDY		YESO	10/23/2007	12/13/2007	
30015353960000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	11	LOCO HILLS	NEW MEXICO	EDDY		YESO	10/13/2007	12/7/2007	
30015353970000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	12	LOCO HILLS	NEW MEXICO	EDDY		YESO	9/19/2007	12/11/2007	
30015359270000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	16	LOCO HILLS	NEW MEXICO	EDDY		YESO	2/10/2008	3/23/2008	
30015359320000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	17	LOCO HILLS	NEW MEXICO	EDDY		YESO	1/16/2008	2/27/2008	
30015367070000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	21	LOCO HILLS	NEW MEXICO	EDDY		YESO	3/18/2009	5/17/2009	
30015367100000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	24	LOCO HILLS	NEW MEXICO	EDDY		YESO	3/27/2009	4/30/2009	
30015367110000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	25	LOCO HILLS	NEW MEXICO	EDDY		YESO	8/28/2009	10/8/2009	
30015367120000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	26	LOCO HILLS	NEW MEXICO	EDDY		YESO	6/16/2009	7/20/2009	
30015366660000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	27	LOCO HILLS	NEW MEXICO	EDDY		YESO	1/6/2010		
30015366630000	COG OPERATING LLC	POLARIS B FEDERAL	POLARIS B FEDERAL	31	LOCO HILLS	NEW MEXICO	EDDY		YESO	6/4/2009	7/14/2009	
30015207350000	GULF OIL CORP	HOLDER FED NCT-B	HOLDER FED NCT-B	3	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG / SAN A	8/30/1972	9/28/1972	
30015041140000	WELCH THOMAS F	GULF	GULF	1	GRAYBURG JACKSON	NEW MEXICO	EDDY			5/16/1959	7/13/1959	
30015204790001	CBS OPERATING CORP	LOCO HILLS FEDERAL 'A'	LOCO HILLS FEDERAL 'A'	1	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	9/27/1971	10/7/1971	
30015354300000	COG OPERATING LLC	ELECTRA FEDERAL	ELECTRA FEDERAL	15	LOCO HILLS	NEW MEXICO	EDDY		YESO	9/17/2007	10/29/2007	
30015206110000	CBS OPERATING CORP	LOCO HILLS 'A' FED	LOCO HILLS 'A' FED	6	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	3/15/1972	5/11/1972	
30015206160000	CBS OPERATING CORP	LOCO HILLS 'A' FED	LOCO HILLS 'A' FED	8	GRAYBURG JACKSON	NEW MEXICO	EDDY		GRAYBURG	5/4/1972	5/15/1972	
30015206110001	CBS OPERATING CORP	LOCO HILLS 'A' FEDERAL	LOCO HILLS 'A' FEDERAL	WI-6	GRAYBURG JACKSON	NEW MEXICO	EDDY			1/10/1982	1/20/1982	
30015206110002	CBS OPERATING CORP	LOCO HILLS A	LOCO HILLS A	6	GRAYBURG JACKSON	NEW MEXICO	EDDY		SAN ANDRES	7/21/2006	8/22/2006	
30015317760000	COG OPERATING LLC	ELECTRA FEDERAL	ELECTRA FEDERAL	4	LOCO HILLS	NEW MEXICO	EDDY		PADDOCK	6/27/2001	8/14/2001	
30015357830000	COG OPERATING LLC	ELECTRA FEDERAL	ELECTRA FEDERAL	18	LOCO HILLS	NEW MEXICO	EDDY		YESO	5/6/2009	6/15/2009	
300153562720101	COG OPERATING LLC	ELECTRA FEDERAL	ELECTRA FEDERAL	24	LOCO HILLS	NEW MEXICO	EDDY		PADDOCK	3/27/2009	4/22/2009	
30015370820000	COG OPERATING LLC	ELECTRA FEDERAL	ELECTRA FEDERAL	39	LOCO HILLS	NEW MEXICO	EDDY		YESO	12/15/2009		
30015221540001	COG OPERATING LLC	ETZ 'C' STATE	ETZ 'C' STATE	27	FREN	NEW MEXICO	EDDY		SEVEN RIVERS	10/8/1979	10/12/1979	

Texaco BE 8 Wells by Sec

API Number	Operator Current Name	Lease Name	Well #	Field Name	State Name	County Name	Formation Producing Name	Date Spud	Date Completion
30015206840000	COG OPERATING LLC	ETZ STATE UNIT	102	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	6/24/1972	7/22/1972
30015206870000	COG OPERATING LLC	ETZ STATE UNIT	104	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	7/13/1972	8/22/1972
30015106080000	COG OPERATING LLC	ETZ STATE	11	GRAYBURG JACKSON	NEW MEXICO	EDDY	QUEEN	11/12/1963	12/6/1963
30015207470000	COG OPERATING LLC	ETZ STATE	24	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	11/24/1972	12/21/1972
30015041730000	COG OPERATING LLC	ETZ STATE B	6	GRAYBURG JACKSON	NEW MEXICO	EDDY		7/17/1941	8/11/1941
30015201330000	COG OPERATING LLC	ETZ STATE B	14	GRAYBURG JACKSON	NEW MEXICO	EDDY	QUEEN	4/11/1968	5/18/1968
30015205410000	COG OPERATING LLC	ETZ STATE B	18	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	7/3/1972	7/26/1972
30015041740000	COG OPERATING LLC	ETZ STATE C	7	GRAYBURG JACKSON	NEW MEXICO	EDDY		9/19/1941	12/11/1941
30015041750000	COG OPERATING LLC	ETZ STATE C	8	GRAYBURG JACKSON	NEW MEXICO	EDDY		7/20/1944	8/21/1944
30015104970000	COG OPERATING LLC	ETZ STATE C	WH10	GRAYBURG JACKSON	NEW MEXICO	EDDY		5/26/1964	6/29/1964
30015201210000	COG OPERATING LLC	ETZ STATE C	WH12	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG	2/4/1968	3/4/1968
30015104960000	COG OPERATING LLC	ETZ STATE C	WH9	GRAYBURG JACKSON	NEW MEXICO	EDDY		4/7/1964	6/8/1964
30015041760000	COG OPERATING LLC	ETZ STATE J	2	GRAYBURG JACKSON	NEW MEXICO	EDDY		5/4/1941	7/8/1941
30015100460001	COG OPERATING LLC	ETZ STATE UNIT	106	GRAYBURG JACKSON	NEW MEXICO	EDDY	SAN ANDRES D	1/1/1972	4/10/1972
30015205510000	COG OPERATING LLC	ETZ STATE UNIT	107	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	6/14/1972	7/15/1972
30015314910000	COG OPERATING LLC	HOUMA STATE	1	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	1/12/2001	3/20/2001
30015315780000	COG OPERATING LLC	HOUMA STATE	2	LOCO HILLS	NEW MEXICO	EDDY	YESO	11/5/2006	12/25/2006
30015352560000	COG OPERATING LLC	HOUMA STATE	3	LOCO HILLS	NEW MEXICO	EDDY	YESO	4/11/2007	5/23/2007
30015357670000	COG OPERATING LLC	HOUMA STATE	4	LOCO HILLS	NEW MEXICO	EDDY	YESO	10/30/2007	12/6/2007
30015364940000	COG OPERATING LLC	HOUMA STATE	5	LOCO HILLS	NEW MEXICO	EDDY	YESO	1/19/2009	2/24/2009
30015364950000	COG OPERATING LLC	HOUMA STATE	6	LOCO HILLS	NEW MEXICO	EDDY	YESO	11/2/2008	12/8/2008
30015364960000	COG OPERATING LLC	HOUMA STATE	7	LOCO HILLS	NEW MEXICO	EDDY	GLORIETA	3/8/2009	4/17/2009
30015364770000	COG OPERATING LLC	IMPERIAL STATE	4	LOCO HILLS	NEW MEXICO	EDDY	YESO	4/21/2009	5/20/2009
30015310190000	COG OPERATING LLC	IMPERIAL STATE	5	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	10/15/2000	12/12/2000
30015348660000	COG OPERATING LLC	IMPERIAL STATE	1	LOCO HILLS	NEW MEXICO	EDDY	YESO	7/7/2006	8/22/2006
30015313670000	COG OPERATING LLC	MESILLA STATE	2	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	11/11/2000	1/10/2001
30015313660000	COG OPERATING LLC	MESILLA STATE	3	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	1/23/2001	3/26/2001
30015345380000	COG OPERATING LLC	MESILLA STATE	4	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	4/2/2006	5/9/2006
30015352550000	COG OPERATING LLC	MESILLA STATE	5	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	7/19/2007	9/23/2007
30015352540000	COG OPERATING LLC	MESILLA STATE	6	LOCO HILLS	NEW MEXICO	EDDY	YESO	6/29/2007	8/20/2007
30015357640000	COG OPERATING LLC	MESILLA STATE	7	LOCO HILLS	NEW MEXICO	EDDY	YESO	10/3/2007	12/15/2007
30015357650000	COG OPERATING LLC	MESILLA STATE	8	LOCO HILLS	NEW MEXICO	EDDY	YESO	11/7/2007	12/19/2007
30015357660000	COG OPERATING LLC	MESILLA STATE	9	LOCO HILLS	NEW MEXICO	EDDY	YESO	9/21/2007	12/6/2007
30015364870000	COG OPERATING LLC	MESILLA STATE	10	LOCO HILLS	NEW MEXICO	EDDY	YESO	4/1/2009	5/13/2009
30015364910000	COG OPERATING LLC	MESILLA STATE	11	LOCO HILLS	NEW MEXICO	EDDY	YESO	12/28/2009	
30015364920000	COG OPERATING LLC	MESILLA STATE	1	LOCO HILLS	NEW MEXICO	EDDY	YESO	5/24/2009	7/7/2009
30015305910000	COG OPERATING LLC	PAWNEE STATE	2	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	11/24/2000	1/8/2001
30015313680000	COG OPERATING LLC	PAWNEE STATE	3	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	12/30/2000	3/10/2001
30015348830000	COG OPERATING LLC	PAWNEE STATE	4	LOCO HILLS	NEW MEXICO	EDDY	YESO	1/11/2007	3/12/2007
30015348840000	COG OPERATING LLC	PAWNEE STATE	1	GRAYBURG JACKSON	NEW MEXICO	EDDY	QUEEN	7/1/2007	8/19/2007
30015041770000	COG OPERATING LLC	RANDEL STATE	2	GRAYBURG JACKSON	NEW MEXICO	EDDY	QUEEN	7/28/1952	9/20/1952
30015041780000	COG OPERATING LLC	RANDEL STATE	3	GRAYBURG JACKSON	NEW MEXICO	EDDY	QUEEN	2/11/1953	4/11/1953
30015205500000	COG OPERATING LLC	RANDEL STATE	3	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	6/4/1972	7/11/1972
30015261100000	COG OPERATING LLC	TEXACO BE	3	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG	6/3/1989	8/8/1989
30015315830000	COG OPERATING LLC	TEXACO BE	5	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	4/6/2001	5/12/2001

API Number	Operator Current Name	Lease Name	Well #	Field Name	State Name	County Name	Formation Producing Name	Date Spud	Date Completion
30015315850000	COG OPERATING LLC	TEXACO BE	6	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	3/6/2001	4/8/2001
30015262330001	COG OPERATING LLC	TEXACO BE	4	LOCO HILLS	NEW MEXICO	EDDY	BLINEBRY	11/5/2008	1/9/2009
30015345390000	COG OPERATING LLC	TEXACO BE	7	LOCO HILLS	NEW MEXICO	EDDY	PADDOCK	2/24/2006	4/12/2006
30015352530000	COG OPERATING LLC	TEXACO BE	8	LOCO HILLS	NEW MEXICO	EDDY	YESO	5/2/2007	6/18/2007
30015363520000	COG OPERATING LLC	TEXACO BE	9	LOCO HILLS	NEW MEXICO	EDDY	GLORIETA	10/10/2008	11/24/2008
30015363530000	COG OPERATING LLC	TEXACO BE	10	LOCO HILLS	NEW MEXICO	EDDY	YESO	8/8/2008	9/24/2008
30015364880000	COG OPERATING LLC	TEXACO BE	11	LOCO HILLS	NEW MEXICO	EDDY	YESO	12/21/2008	2/17/2009
30015041690002	MACK ENERGY CORP	ETZ-STATE	5	GRAYBURG	NEW MEXICO	EDDY	QUEEN	12/18/1965	10/10/1966
30015207640000	MACK ENERGY CORP	STATE BE	2	GRAYBURG JACKSON	NEW MEXICO	EDDY	GRAYBURG / SAN A	11/28/1972	12/24/1972
30015041800000	RANDEL O H	STATE	1	GRAYBURG JACKSON	NEW MEXICO	EDDY		1/20/1948	6/30/1948
30015041810000	TIDEWATER OIL CO	STATE I	1	GRAYBURG JACKSON	NEW MEXICO	EDDY		10/9/1958	8/19/1959

API Number	Operator Current Name	Lease Name	Well #	Date Aband'd	Date First Report	Date Last Activity
30015205370001	CBS OPERATING CORP	LOCO HILLS 'B' FED	1		8/1/1973	4/30/2007
30015206170000	CBS OPERATING CORP	LOCO HILLS 'B' FED	2		8/1/1973	8/16/2005
30015206720000	CBS OPERATING CORP	LOCO HILLS 'B' FED	5		8/1/1973	8/16/2005
30015206730000	CBS OPERATING CORP	LOCO HILLS 'B' FED	6		8/1/1973	8/16/2005
30015206740000	CBS OPERATING CORP	LOCO HILLS 'B' FED	7		8/1/1973	8/16/2005
30015206750000	CBS OPERATING CORP	LOCO HILLS 'B' FED	8	1/15/1973	8/1/1973	8/16/2005
3001521100000	CBS OPERATING CORP	LOCO HILLS 'B' FED	9		11/20/1984	8/16/2005
30015358230000	CIMAREX ENERGY OF CO	STEWART 9 FEDERAL COM	1		6/7/2007	9/2/2009
30015354710000	COG OPERATING LLC	HOLDER CB FEDERAL	11		4/5/2007	9/23/2009
30015359630000	COG OPERATING LLC	HOLDER CB FEDERAL	13		12/17/2007	9/23/2009
30015366680000	COG OPERATING LLC	HOLDER CB FEDERAL	17		9/9/2008	11/18/2009
30015366690000	COG OPERATING LLC	HOLDER CB FEDERAL	18		9/9/2008	11/25/2009
30015347070000	COG OPERATING LLC	POLARIS B FEDERAL	5		2/3/2006	1/23/2008
30015356490000	COG OPERATING LLC	POLARIS B FEDERAL	6		12/18/2006	9/23/2009
30015356990000	COG OPERATING LLC	POLARIS B FEDERAL	7		12/18/2006	8/19/2009
30015353930000	COG OPERATING LLC	POLARIS B FEDERAL	8		12/18/2006	9/23/2009
30015353940000	COG OPERATING LLC	POLARIS B FEDERAL	9		12/20/2006	9/23/2009
30015353960000	COG OPERATING LLC	POLARIS B FEDERAL	11		12/20/2006	9/23/2009
30015353970000	COG OPERATING LLC	POLARIS B FEDERAL	12		12/20/2006	9/23/2009
30015359270000	COG OPERATING LLC	POLARIS B FEDERAL	16		9/28/2007	9/23/2009
30015359320000	COG OPERATING LLC	POLARIS B FEDERAL	17		9/28/2007	9/23/2009
30015367070000	COG OPERATING LLC	POLARIS B FEDERAL	21		9/9/2008	9/23/2009
30015367100000	COG OPERATING LLC	POLARIS B FEDERAL	24		9/9/2008	9/23/2009
30015367110000	COG OPERATING LLC	POLARIS B FEDERAL	25		9/9/2008	11/25/2009
30015367120000	COG OPERATING LLC	POLARIS B FEDERAL	26		9/9/2008	9/23/2009
30015366660000	COG OPERATING LLC	POLARIS B FEDERAL	27		9/9/2008	10/7/2009
30015366630000	COG OPERATING LLC	POLARIS B FEDERAL	31		9/9/2008	10/7/2009
30015207350000	GULF OIL CORP	HOLDER FED NCT-B	3		8/1/1973	3/31/2009
30015041140000	WELCH THOMAS F	GULF	1		8/1/1973	8/15/2005
30015204790001	CBS OPERATING CORP	LOCO HILLS FEDERAL 'A'	1		6/1/1988	7/20/2006
30015354300000	COG OPERATING LLC	ELECTRA FEDERAL	15		12/29/2006	9/23/2009
30015206110000	CBS OPERATING CORP	LOCO HILLS 'A' FED	6		6/1/1977	2/2/2007
30015206160000	CBS OPERATING CORP	LOCO HILLS 'A' FED	8		6/1/1977	8/16/2005
30015206110001	CBS OPERATING CORP	LOCO HILLS 'A' FEDERAL	WI-6		4/17/1982	2/2/2007
30015206110002	CBS OPERATING CORP	LOCO HILLS 'A'	6		10/24/2006	2/2/2007
30015317760000	COG OPERATING LLC	ELECTRA FEDERAL	4		1/26/2001	8/18/2005
30015357830000	COG OPERATING LLC	ELECTRA FEDERAL	18		7/23/2007	10/21/2009
30015362720101	COG OPERATING LLC	ELECTRA FEDERAL	24		7/9/2009	9/23/2009
30015370820000	COG OPERATING LLC	ELECTRA FEDERAL	39		6/1/2009	7/22/2009
30015221540001	COG OPERATING LLC	ETZ 'C' STATE	27	11/21/2002	3/31/1982	8/16/2005

Texaco BE # 8 Wells by Sec

API Number	Operator Current Name	Lease Name	Well #	Date Aband'd	Date First Report	Date Last Activity
30015206840000	COG OPERATING LLC	ETZ STATE UNIT	102		8/1/1973	8/16/2005
30015206870000	COG OPERATING LLC	ETZ STATE UNIT	104		8/1/1973	8/16/2005
30015106080000	COG OPERATING LLC	ETZ STATE	11	8/16/2000	8/1/1973	8/16/2005
30015207470000	COG OPERATING LLC	ETZ STATE	24		8/1/1973	8/16/2005
30015041730000	COG OPERATING LLC	ETZ STATE B	6		8/1/1973	8/15/2005
30015201350000	COG OPERATING LLC	ETZ STATE B	14	8/12/2000	8/1/1973	8/16/2005
30015205410000	COG OPERATING LLC	ETZ STATE B	18		8/1/1973	8/16/2005
30015041740000	COG OPERATING LLC	ETZ STATE C	7		8/1/1973	8/15/2005
30015041750000	COG OPERATING LLC	ETZ STATE C	8	8/18/2000	8/1/1973	8/15/2005
30015104970000	COG OPERATING LLC	ETZ STATE C	W110		8/1/1973	8/16/2005
30015201210000	COG OPERATING LLC	ETZ STATE C	W112		8/1/1973	8/16/2005
30015104960000	COG OPERATING LLC	ETZ STATE C	W19		8/1/1973	8/16/2005
30015041760000	COG OPERATING LLC	ETZ STATE J	2		8/1/1973	8/15/2005
30015100460001	COG OPERATING LLC	ETZ STATE UNIT	106		8/1/1973	8/16/2005
30015205510000	COG OPERATING LLC	ETZ STATE UNIT	107		8/1/1973	8/16/2005
30015314910000	COG OPERATING LLC	HOUMA STATE	1	12/7/2000	12/7/2000	8/18/2005
30015315780000	COG OPERATING LLC	HOUMA STATE	2		1/29/2001	9/23/2009
30015352560000	COG OPERATING LLC	HOUMA STATE	3		12/4/2006	8/19/2009
30015357670000	COG OPERATING LLC	HOUMA STATE	4		8/23/2007	8/19/2009
30015364940000	COG OPERATING LLC	HOUMA STATE	5		8/12/2008	6/24/2009
30015364950000	COG OPERATING LLC	HOUMA STATE	6		8/12/2008	9/23/2009
30015364960000	COG OPERATING LLC	HOUMA STATE	7		10/22/2008	9/23/2009
30015364770000	COG OPERATING LLC	HOUMA STATE	8		8/12/2008	9/23/2009
30015310190000	COG OPERATING LLC	IMPERIAL STATE	4		3/20/2000	8/18/2005
30015348660000	COG OPERATING LLC	IMPERIAL STATE	5		5/18/2006	12/19/2007
30015313670000	COG OPERATING LLC	MESILLA STATE	1		10/12/2000	8/18/2005
30015313660000	COG OPERATING LLC	MESILLA STATE	2		10/12/2000	8/18/2005
30015345380000	COG OPERATING LLC	MESILLA STATE	3		1/19/2006	1/23/2007
30015352550000	COG OPERATING LLC	MESILLA STATE	4		12/4/2006	9/23/2009
30015352540000	COG OPERATING LLC	MESILLA STATE	5		12/4/2006	8/19/2009
30015357640000	COG OPERATING LLC	MESILLA STATE	6		8/23/2007	8/19/2009
30015357650000	COG OPERATING LLC	MESILLA STATE	7		8/23/2007	8/19/2009
30015357660000	COG OPERATING LLC	MESILLA STATE	8		8/23/2007	8/19/2009
30015364870000	COG OPERATING LLC	MESILLA STATE	9		8/12/2008	9/23/2009
30015364910000	COG OPERATING LLC	MESILLA STATE	10		10/22/2008	1/2/2009
30015364920000	COG OPERATING LLC	MESILLA STATE	11		8/12/2008	9/23/2009
30015305910000	COG OPERATING LLC	PAWNEE STATE	1		3/23/1999	8/18/2005
30015313680000	COG OPERATING LLC	PAWNEE STATE	2		10/12/2000	8/18/2005
30015348830000	COG OPERATING LLC	PAWNEE STATE	3		5/22/2006	1/2/2009
30015348840000	COG OPERATING LLC	PAWNEE STATE	4		5/22/2006	8/19/2009
30015041770000	COG OPERATING LLC	RANDEL STATE	1	2/12/2002	8/1/1973	8/15/2005
30015041780000	COG OPERATING LLC	RANDEL STATE	2		8/1/1973	8/15/2005
30015205500000	COG OPERATING LLC	RANDEL STATE	3		8/1/1973	8/16/2005
30015261100000	COG OPERATING LLC	TEXACO 'BE'	3	7/22/2004	5/3/1989	4/24/2007
30015315830000	COG OPERATING LLC	TEXACO 'BE'	5		2/5/2001	8/18/2005

API Number	Operator Current Name	Lease Name	Well #	Date Aband'd	Date First Report	Date Last Activity
30015315850000	COG OPERATING LLC	TEXACO BE	6		2/5/2001	7/24/2006
30015262330001	COG OPERATING LLC	TEXACO BE	4		3/27/2009	5/6/2009
30015345390000	COG OPERATING LLC	TEXACO BE	7		1/19/2006	1/23/2007
30015352530000	COG OPERATING LLC	TEXACO BE	8		12/4/2006	8/19/2009
30015363520000	COG OPERATING LLC	TEXACO BE	9		6/5/2008	6/24/2009
30015363530000	COG OPERATING LLC	TEXACO BE	10		6/5/2008	9/23/2009
30015364880000	COG OPERATING LLC	TEXACO BE	11		8/12/2008	9/23/2009
30015041690002	MACK ENERGY CORP	ETZ-STATE	5		8/1/1973	11/30/2006
30015207640000	MACK ENERGY CORP	STATE BE	2		8/1/1973	8/16/2005
30015041800000	RANDELO H	STATE	1		8/1/1973	8/15/2005
30015041810000	TIDEWATER OIL CO	STATE I	1		8/1/1973	8/15/2005

Drillings PLUS on CD Scout Ticket**1 STEWART 9 FEDERAL COM** - *not drilled yet 1-13-10*

State: NEW MEXICO
 County: EDDY
 Operator: CIMAREX ENERGY OF CO
 API: 30015358230000
 Initial Class: D
 Target Objective: GAS
 Final Well Class:
 Status:
 Field: LOCO HILLS
 Permit: on OCT 04, 2007
 First Report Date: JUN 07, 2007
 Projected TD: 11650 Formation: MORROW
 Hole Direction: VERTICAL

IC: 30015798442007

Location

Section, Twp., Range: 9 17 S 30 E
 Spot Code: N2 SE SW
 Footage NS EW Origin: 805 FSL 1980 FWL CONGRESS SECTION
 Surface Remark:
 Principal Meridian: NEW MEXICO

Lat/Long: 32.8439300 / -103.9786800 TS

PBHL Footage NS EW Origin:

PBHL Section:

PBHL Remark:

ABHL Footage NS EW Origin:

ABHL Section:

ABHL Remark:

Location Narrative:

Type	Remark
SCALED_FOOT	REGULATORY
IRREG_SECT	N

Dates and Depths

Spud: Spud Date Code:
 TD: on
 LTD:
 TVD:
 PlugBack Depth:
 Completed:
 Formation @ TD: Name:
 Ref. Elevation:
 KB. Elevation:
 Ground Elevation: 3693 GR
 Contractor:
 Rig Release Date: Rig #

Drilling Journal

Lease Acres: 320

Address

Street or PO Box: 1700 LINCOLN ST
 SUITE 1800

City: DENVER

COG OPERATING LLC

Lease & Well

API # 3001535471

Holder CB Federal #11

Active

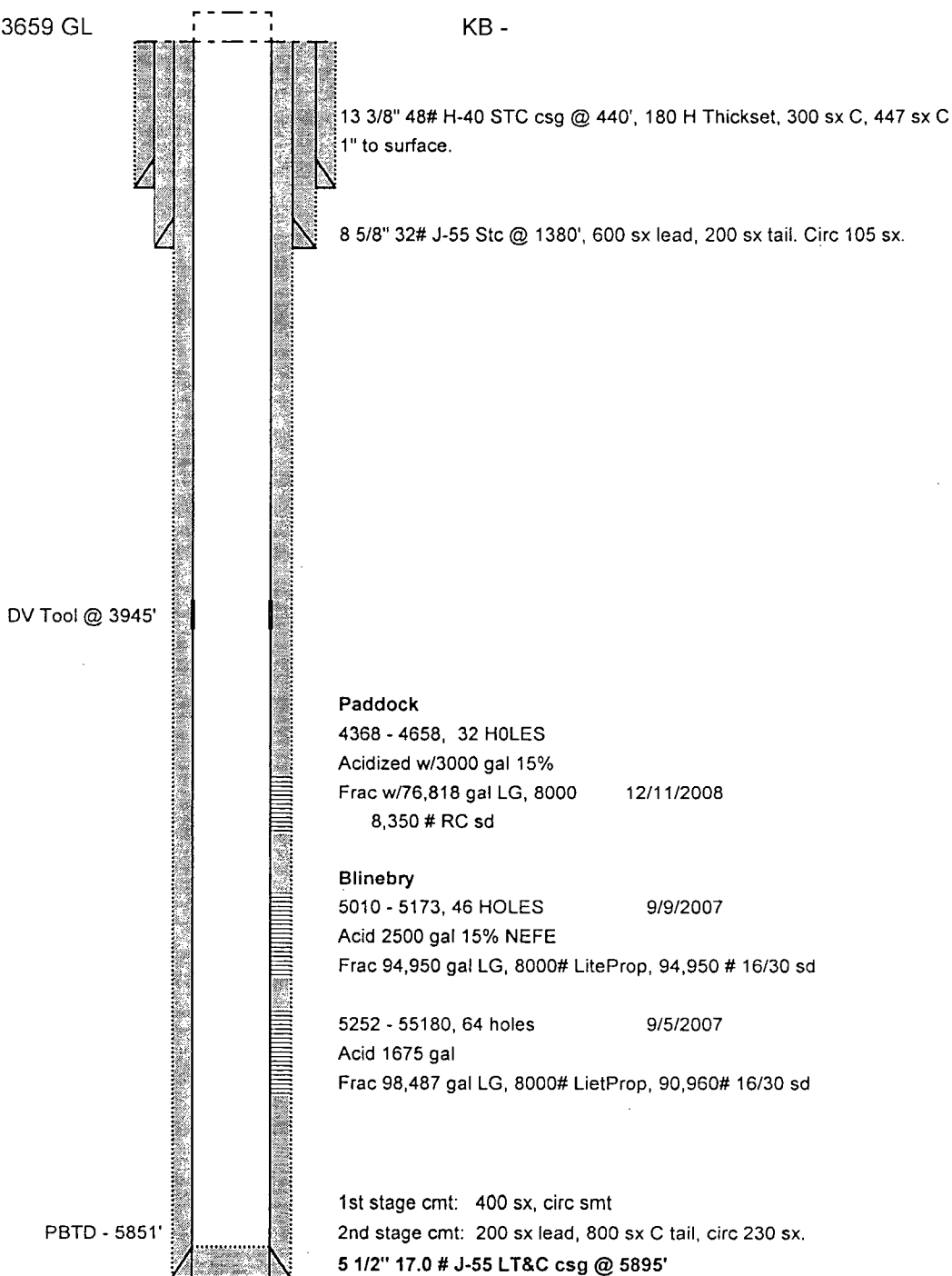
Eddy County NM

Sec 9 M T17S R30E 715 FSL & 990 FWL

Spud: 8/7/07

Elevation - 3659 GL

KB -



COG OPERATING LLC

Lease & Well

API # 3001535963

Spud: 6/26/08

Elevation - 3675 GL

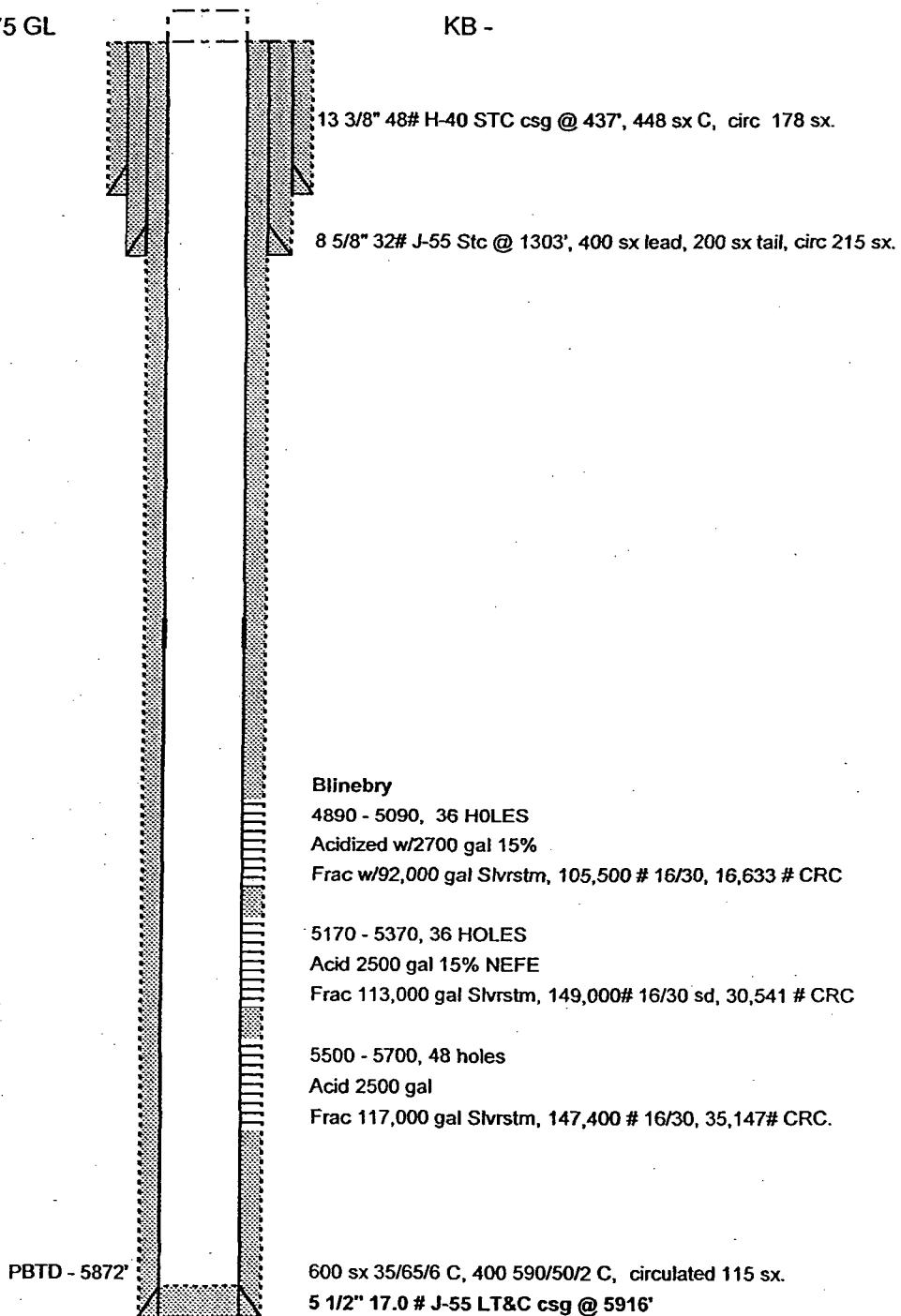
Holder CB Federal #13

Active

Eddy County, NM

Sec 9 M T17S R30E 330 FSL & 380 FWL

KB -



COG OPERATING LLC

Lease & Well #
API # 30-015-36668

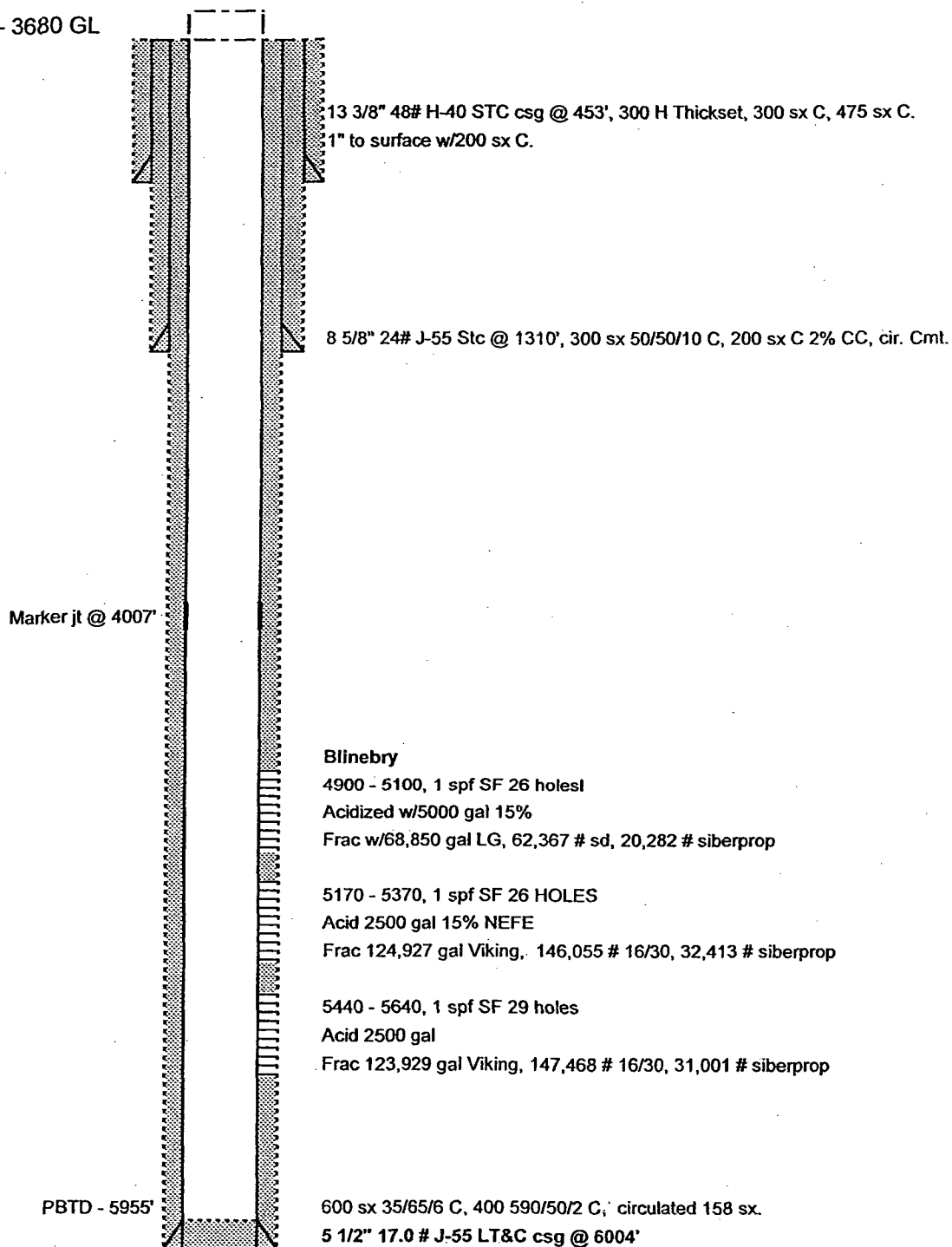
Holder CB Federal #17

Eddy County, NM

Sec 9 L T17S R30E 1650 FSL & 990 FWL

Spud: 7/20/09

Elevation - 3680 GL



COG OPERATING LLC

Lease & Well #
API # 30-015-36669

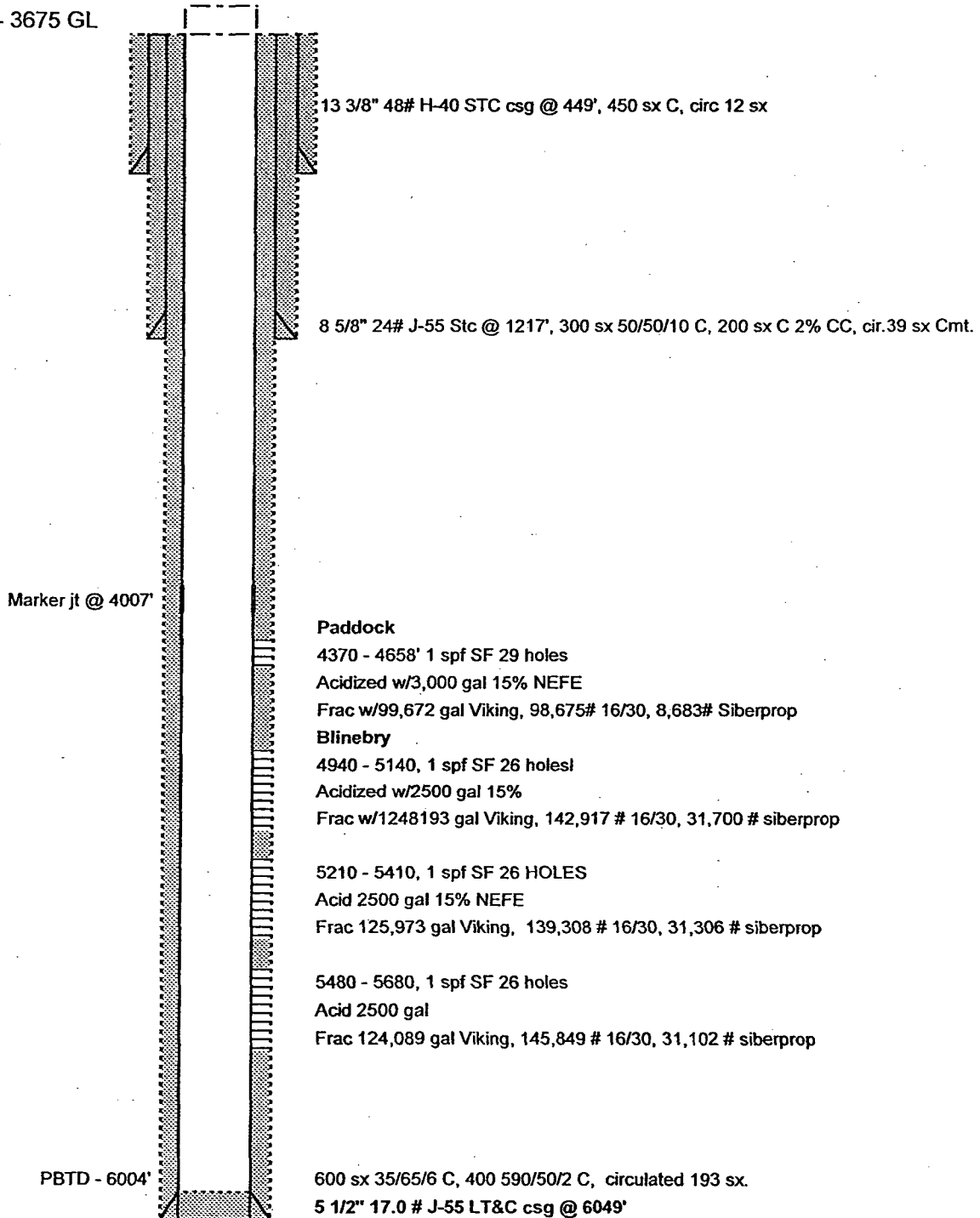
Holder CB Fed #18

Eddy County, NM

Sec 9 M T17S R30E 990 FSL & 330 FWL

Spud: 11/10/09

Elevation - 3675 GL



COG Operating LLC

ACTIVE

Lease & Well #
API# 30 015 34707

Polaris B Federal #5

Eddy County, NM
Sec 9 P T17S R30E 330 FSL & 330 FEL

Spud - 10/6/07

Elevation - 3696

KB -

5 1/2" csg, TOC @ surface

DV tool -3911

Marker jt @ 5021

PBTD - 5964

13 3/8" 48# H-40 STC csg @416', cmt w/928 sx.,
d/n cilrc, 1" to surf after temp sur.
8 5/8" 24# 8rd J-55 STC @ 1333, 700 sx, circ. 200 sx

3/5/2007

Tubing: 136jts new 2 7/8" EUE 8rd
TAC 4286'
48 jts 2 7/8"
SN @ 5791'

Rods: 1 1/4" x 26' PR
2', 4', 6', 8'- 7/8" ponies
73- used 7/8"
155- used 3/4"
2' pony?

Pump: 2.5 x 2 x20' Trash pump

Paddock/Blinebry:

4465 - 4750', 37 holes 3/1/2007

Acidize: 1700 gal, PPI, balls

Frac w/89,795 gal LG, . 99,483# prop.

4942 - 5155', 62 holes 11/13/2006

Acidize w/3000 gal, PPI balls

Frac w/94,710 gal Viking Hyubrid, 98,823# prop

5258 - 5478', 62 holes 11/10/2006

Acidize w/3000 gal, PPI, balls

Frac w/167,50-0 gal LG, 99, 712 # prop

5569 - 5782, 62 holes 11/8/2006

Acidize w/ 3000 gal, PPI, Balls

Frac w/97,104 gal Viking Hybrid, 95 785 # prop

1st stage: 615 sx 50/50, circulated 255 sx.

2nd stage: 1360 sx, circulated 250 sx.

5 1/2" 17# J-55 LT&C csg @ 5978'.

COG Operating LLC

ACTIVE

Lease & Well #
API # 30 015 35649

Polaris B Federal # 6

Eddy County., NM

Sec 9 O.T17 S R30E 156 FSL 1650 FEL

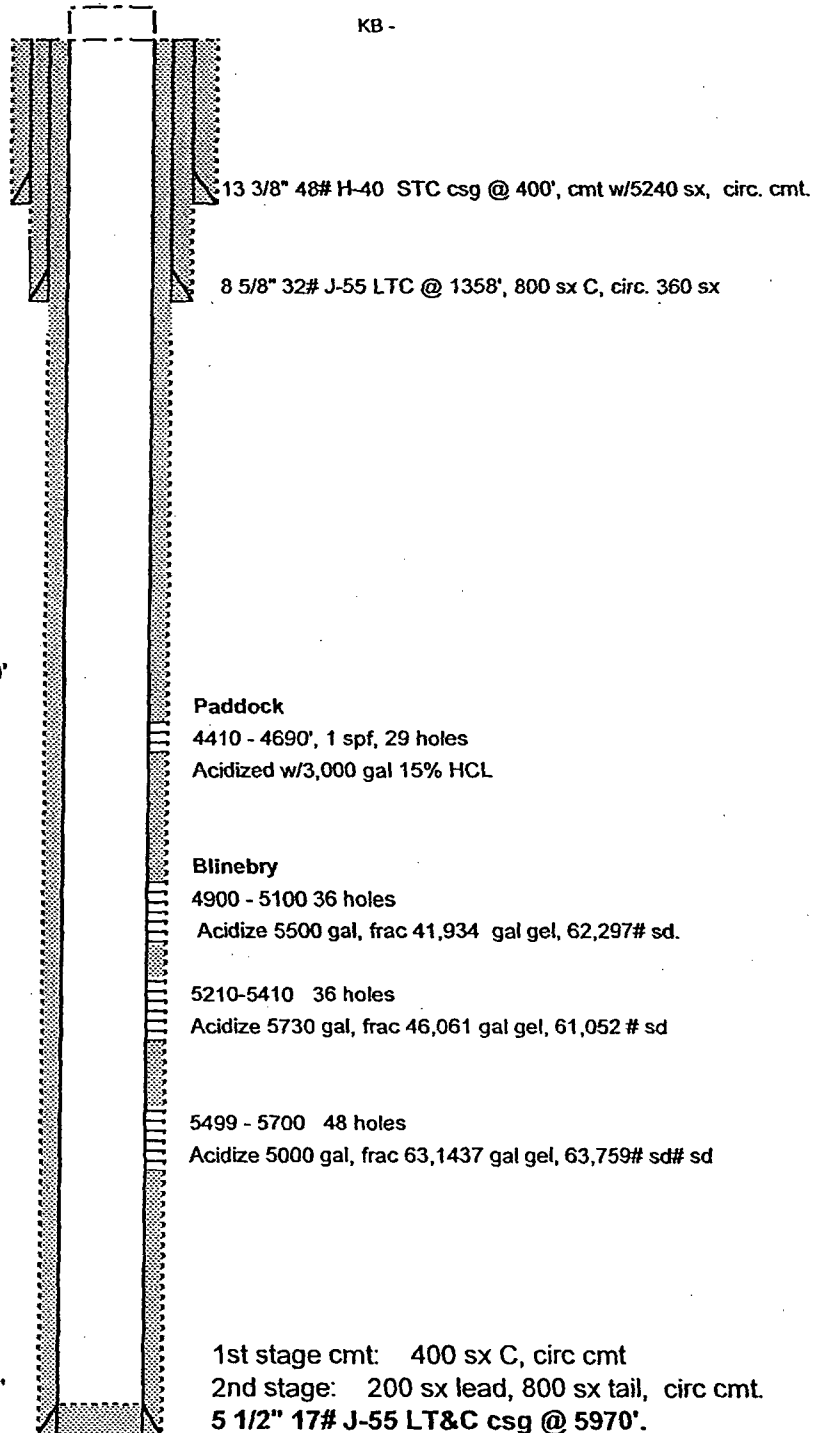
Spud: 8/6/2007

Elevation - 3697' "

KB -

DV tool @ 4250'

PBTD - 5927'



COG Operating LLC

Lease & Well #

API # 3001535699

Polaris B Federal #7

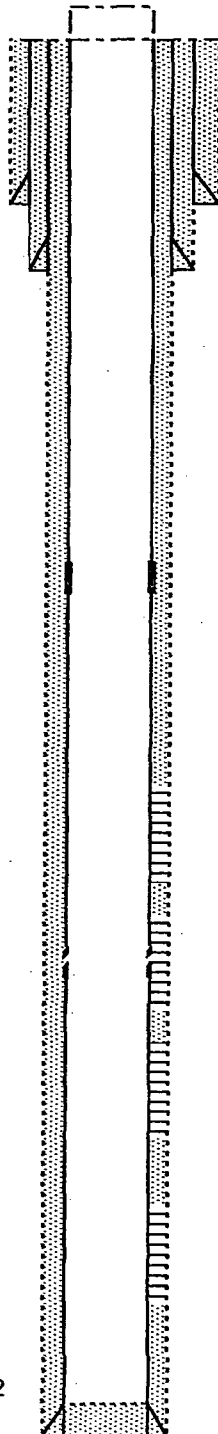
EDDY County, NM

Sec 9 N T17S R30E 860 FSL & 2240 FWL

Spud - 12/22/2007

Elevation - 3696

KB -



13 3/8" 48# H-40 STC csg @421', cmt w/447 sx., circ 42 sx.

8 5/8" 24# 8rd J-55 STC @ 1312, 800 sx, circ. 87 sx

3/5/2007

Tubing: 136jts new 2 7/8" EUE 8rd
TAC 4286'
48 jts 2 7/8"
SN @ 5791'

Rods: 1 1/4" x 26' PR
2',4',6',8'- 7/8" ponies
73- used 7/8"
155- used 3/4"
2' pony?

Pump: 2.5 x 2 x20' Trash pump

Paddock

4386 - 4666', 33 holes 5/21/2008

Acidize: 3000 gal 15/5

Frac w/103,450 gal Gel, 98,306# 16/30, 21,573# SiberProp\

Blinebry

4890 - 5090', 36 holes 1/15/2008

Acidize w/5000 gal 15%

Frac w/72,270 gal gel, 107,000# sd

5180 - 5380', 36 holes 1/15/2008

Acidize w/5000 gal 15%

Frac w/72,7480 gal Gel, 89,200 # sd

5520 - 5720, 48 holes 1/14/2008

Acidize w/ 5000 gal 15%

Frac w/676784 gal gel, 93,867 # sd

PBTD - 5972

Cmt w/700 sx lead, 400 sx tail, circ 282 sx.
5 1/2" 17# K-55 LT&C csg @ 6016'.

COG Operating LLC

ACTIVE

Lease & Well #
API # 30 015 35393

Polaris B Federal # 8

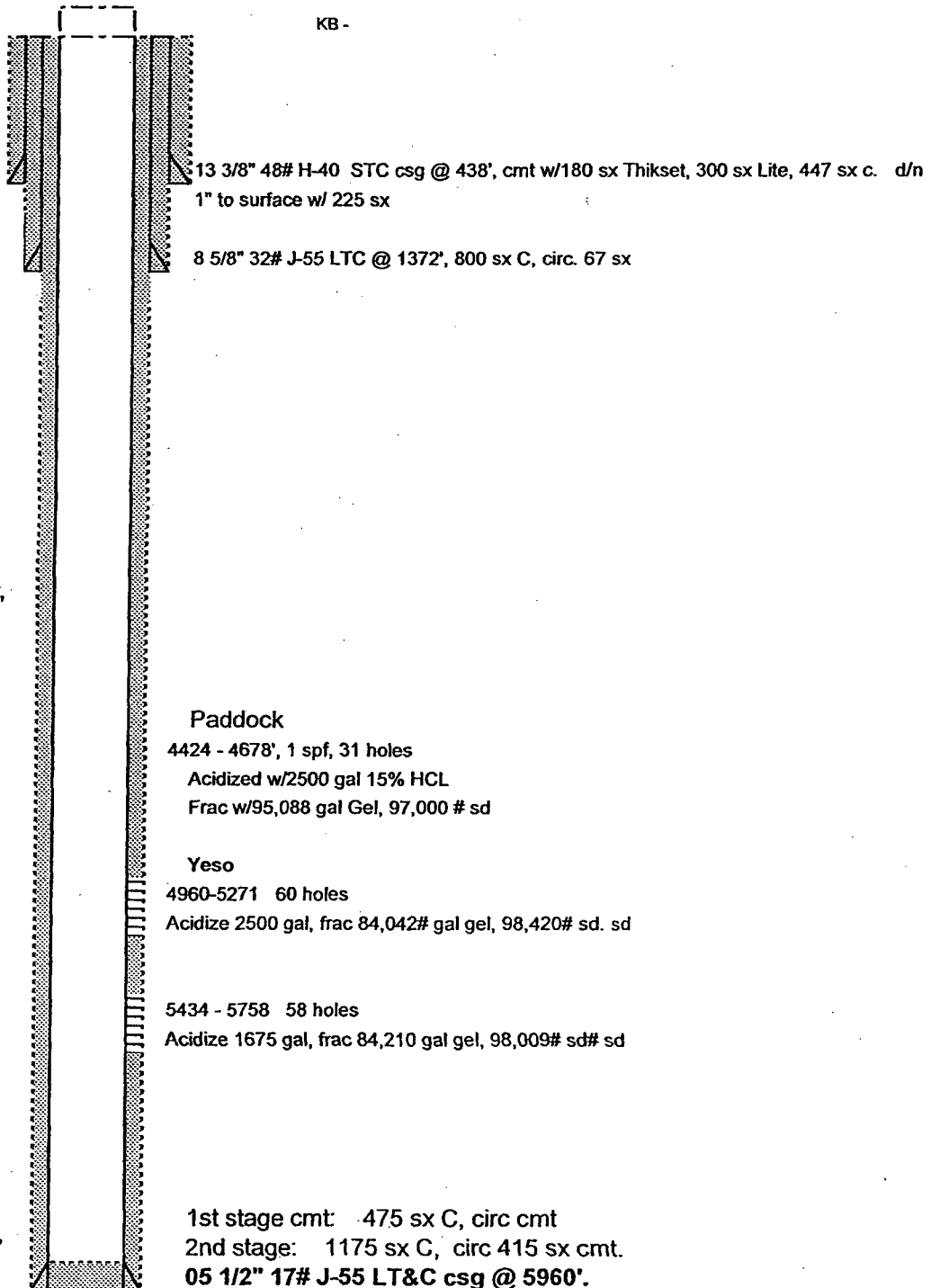
Eddy County., NM

Sec 9 K T17 S R30E 2310 FSL 2310 FWL

Spud: 8/5/2007

Elevation - 3696'

KB -



COG Operating LLC

ACTIVE

Lease & Well #
API # 30 015 35394

Polaris B Federal # 9

Eddy County., NM

Sec 9 J T17 S R30E 2310 FSL 1750 FEL

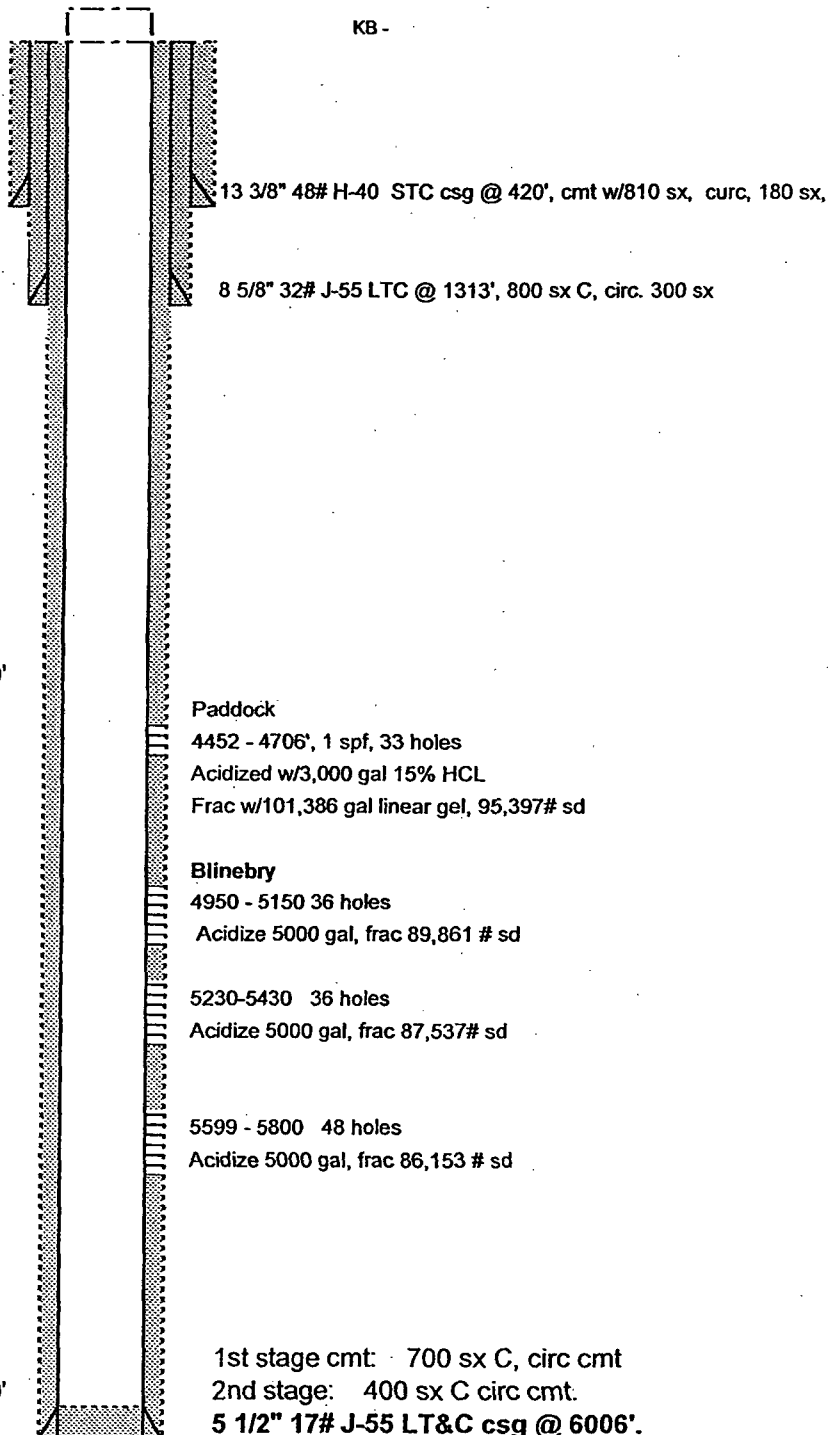
Spud: 10/23/2007

Elevation - 3689' "

KB -

DV tool @ 4250'

PBTD - 5920'



COG Operating LLC

Lease & Well #
API# 30-015-35396

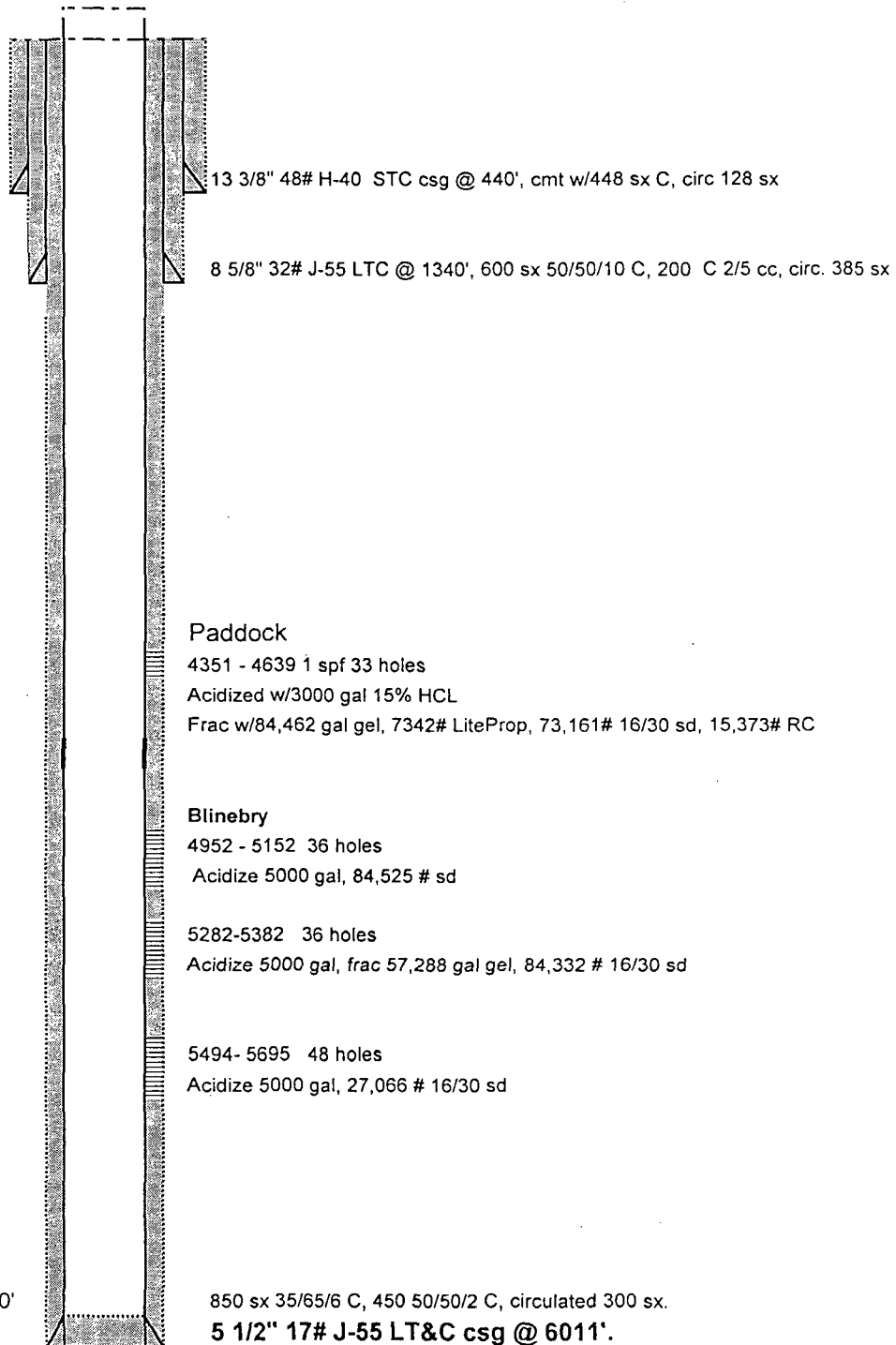
Polaris B Federal # 11

EDDY County, NM

Sec 9 N T17S R30E 330 FSL & 1650 FWL

Spud: 10/13/07

Elevation - 3689'



COG Operating LLC

ACTIVE

Lease & Well #
API # 30 015 35397

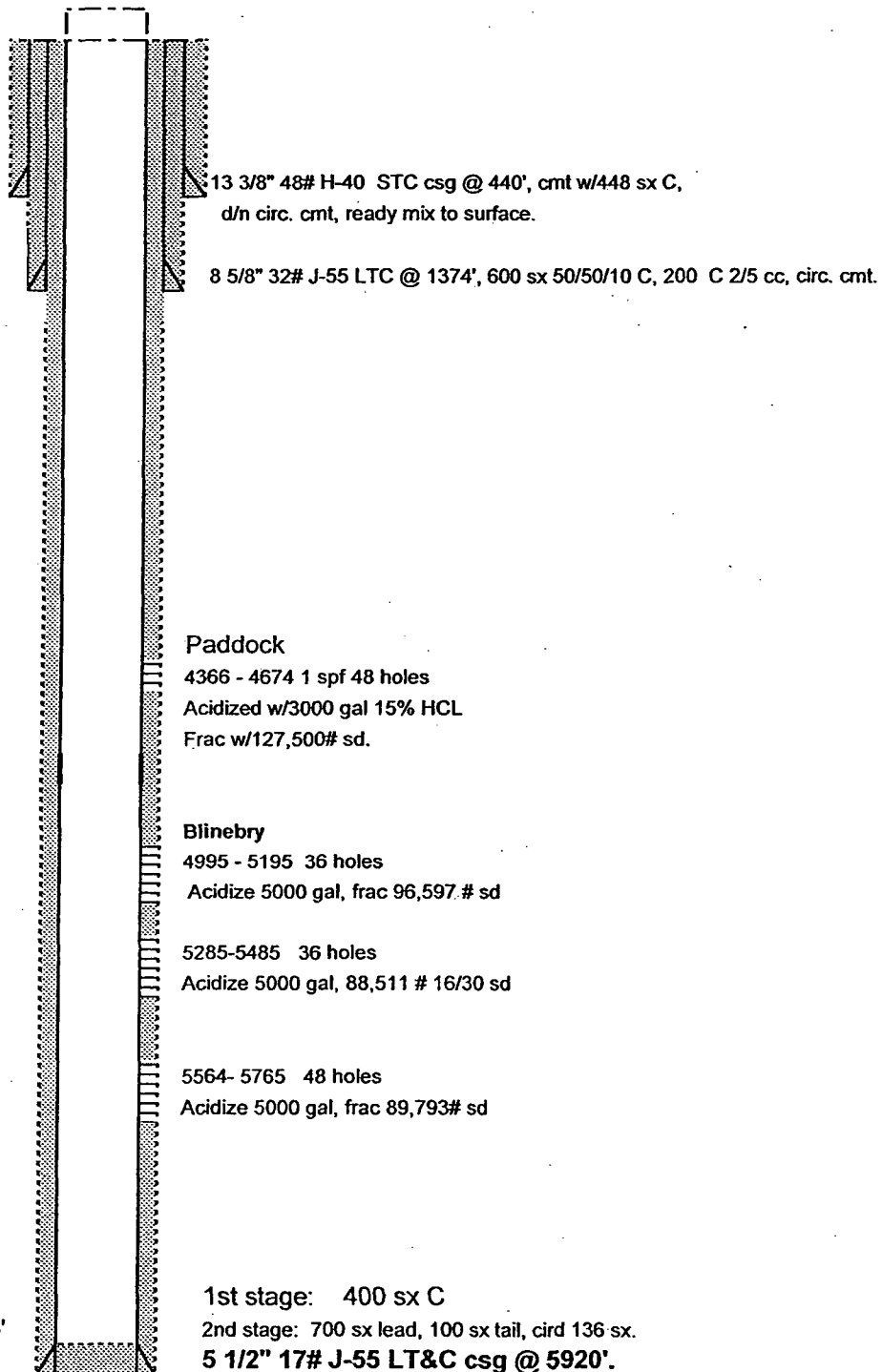
Polaris B Federal # 12

EDDY County, NM

Sec 9 O T17S R30E 330 FSL & 2310 FEL

Spud: 9/19/07

Elevation - 3677'



COG Operating LLC

Lease & Well #
API # 30 015 35927

Polaris B Federal # 16

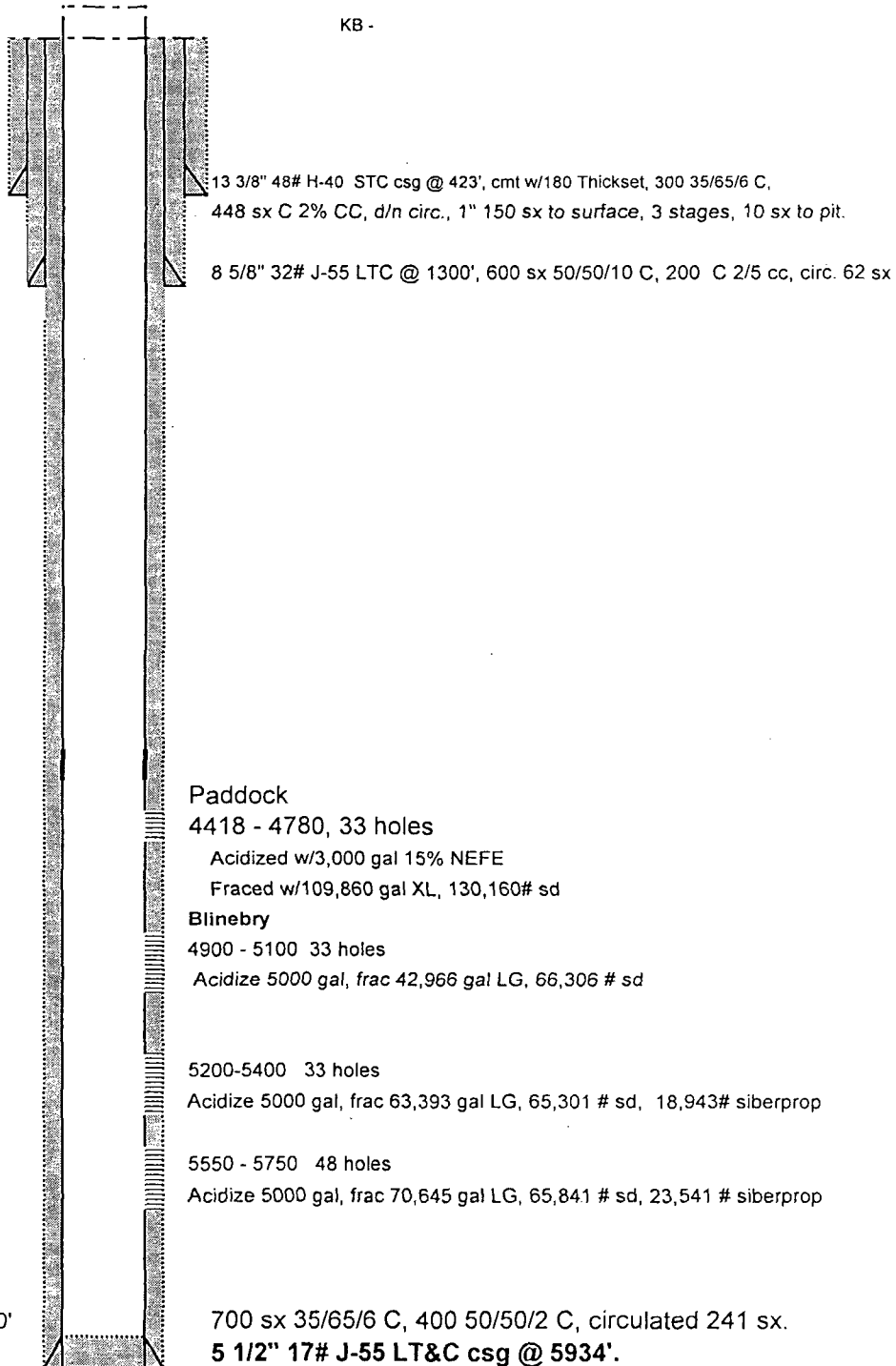
Active
EDDY County, NM

Sec 9 O T17S R30E 330 FSL & 2310 FEL

Spud: 2/8/08

Elevation - 3684'

KB -



COG Operating LLC

Lease & Well #
API # 30 015 35932

Polaris B Federal # 17

Active
EDDY County, NM

Sec 9 K T17S R30E 330 FSL & 2310 FEL

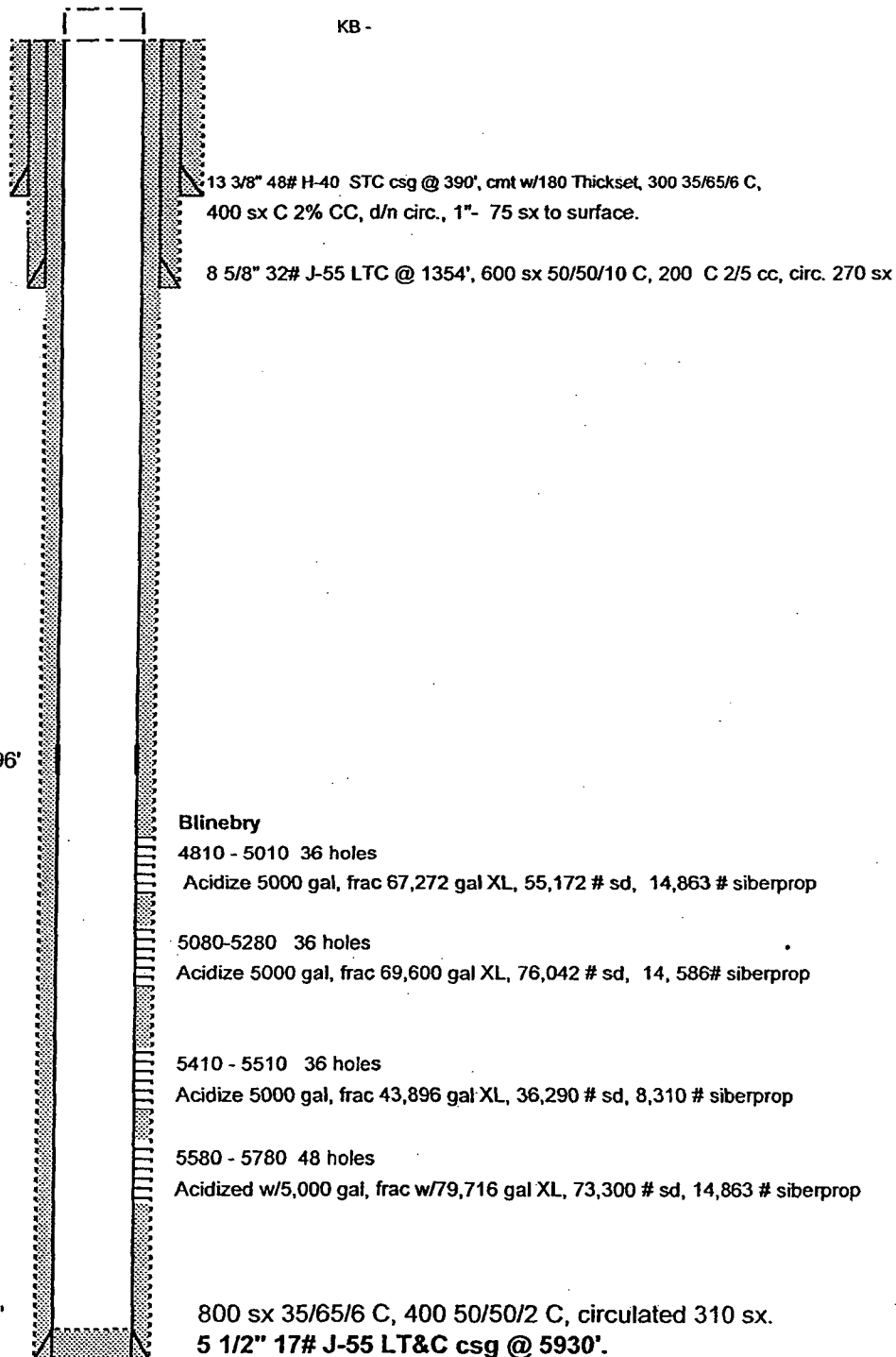
Spud: 1/16/08

Elevation - 3690'

KB -

Marker jt @ 3996'

PBTD - 5883'



COG OPERATING LLC

Lease & Well #
API # 30-015-36707

Polaris B Federal # 21

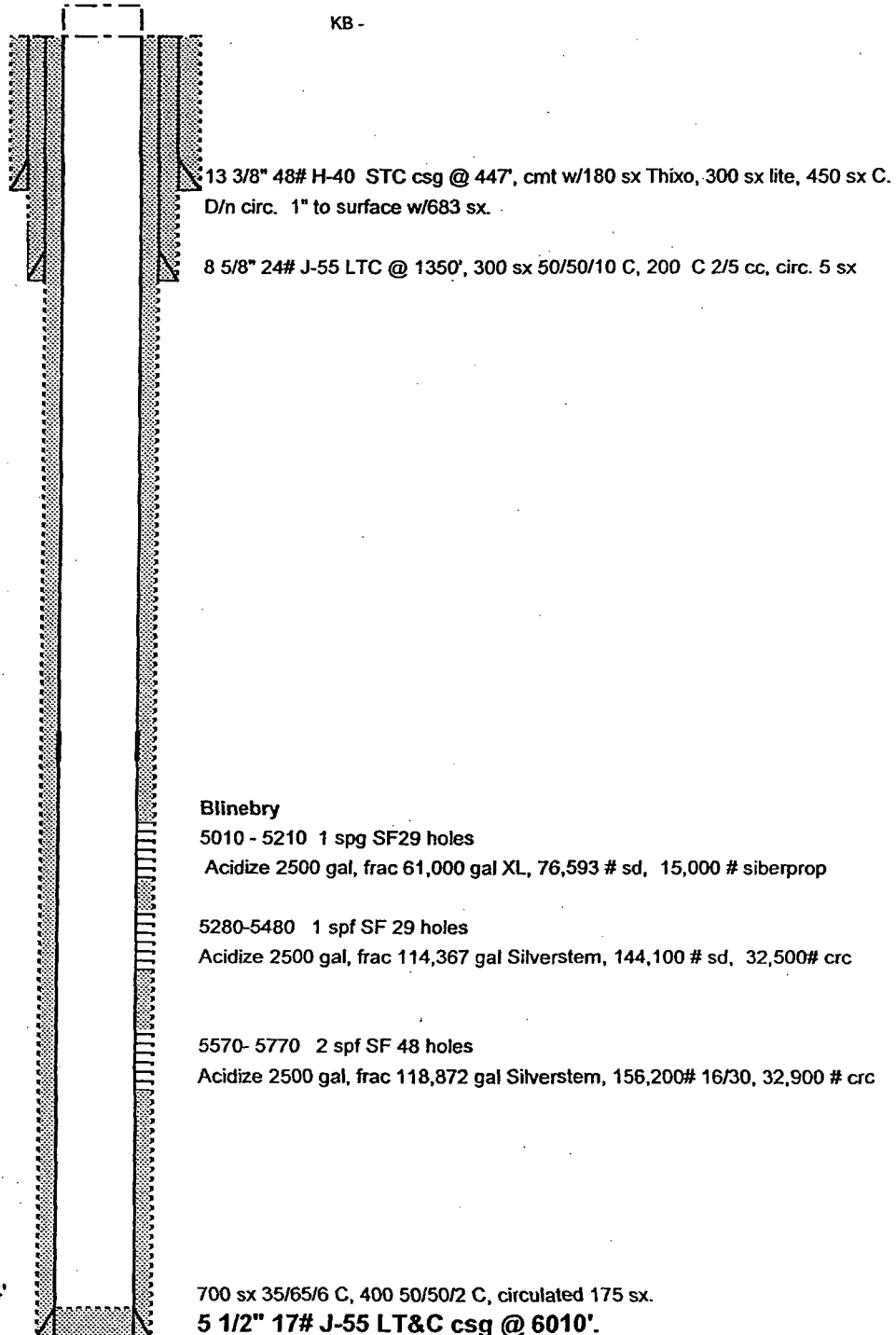
Eddy County, NM

Sec 9 | T17S R30E 2160 FSL & 915 FEL

Spud: 3/18/09

Elevation - 3687'

KB -



COG Operating LLC

Lease & Well #
API # 30-015-36710

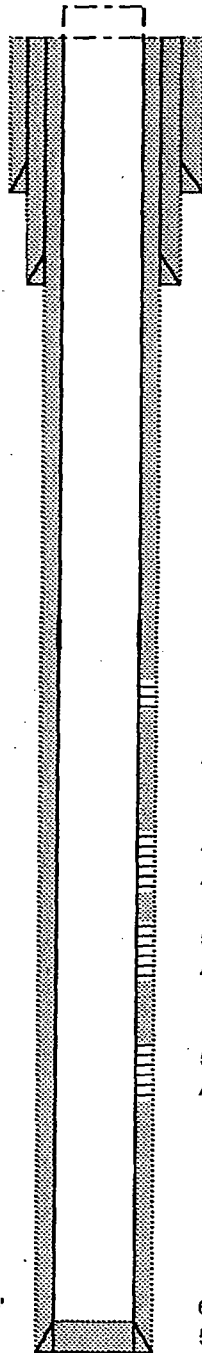
Polaris B Federal # 24

Eddy County, NM
Sec 9 J T17S R30E 1750 FSL & 1650 FEL

Spud: 3/26/09

Elevation - 3683'

KB -



13 3/8" 48# H-40 STC csg @ 442', cmt w/180 sx Thixo, 300 sx lite, 448 sx tail.
Circ 220 sx.

8 5/8" 24# J-55 LTC @ 1306', 300 sx 50/50/10 C, 200' C 2/5 cc, circ. 200 sx

Paddock

4430- 4676 1 spf SF 29 holes

Acidize 2500 gal, frac 91,168 gal Silverstem R-21, 103,632# 16/30, 23,264 # Siberprop

Blinebry

4940 - 5140 2 spf SF 36 holes

Acidize 2500 gal, frac 116,481 gal Silverstem R-21, 147,652# 16/30, 31,275 # Siberprop

5210-5410 2 spf SF 36 holes

Acidize 2500 gal, frac 113,219 gal Silverstem R-21, 143,226# 16/30, 25,530 # Siberprop

5500- 5700 2 spf SF 24 holes

Acidize 2500 gal, frac 115,746 gal Silverstem R-21, 147,250# 16/30, 30,982 # Siberprop

Marker jt @ 4002'

PBTD - 5940'

600 sx 35/65/6 C, 400 50/50/2 C, circulated 208 sx.
5 1/2" 17# J-55 LT&C csg @ 6005'.

COG Operating LLC

Lease & Well #

Polaris B Federal # 25

Eddy County, NM

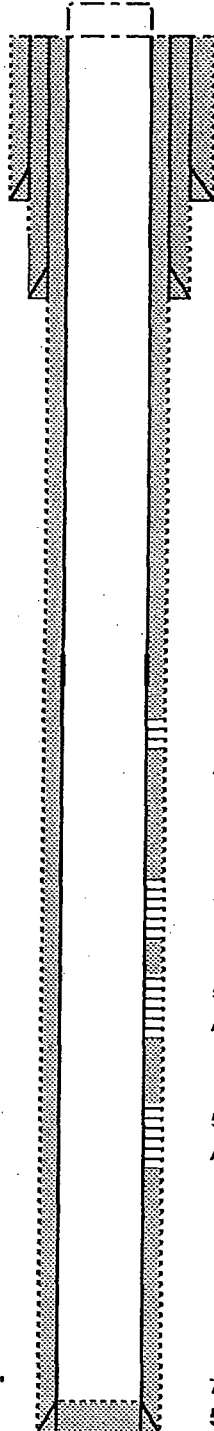
API # 30-015-36711

Sec 9 K T17S R30E 2310 FSL & 1725 FWL

Spud: 8/28/09

Elevation - 3680'

KB -



13 3/8" 48# H-40 STC csg @ 418', cmt w/3500 sx Thixo, 250 sx lite, 448 sx C.
D/n circ. 1" to surface w/175 sx.

8 5/8" 24# J-55 LTC @ 1264', 300 sx 50/50/10 C, 200 C 2/5 cc, circ. 203 sx

Paddock

4409 - 4666 1 spf SF 33 holes

Acidized w/3,000 gal 15% NEFE

Frac w/103,693 gal Viking, 102,452# 16/30, 13,290# Siberprop

Blinebry

5000 - 5200 2 spf SF 36 holes

Acidize 2500 gal, frac 124,458 gal Viking, 147,970 # 16/30, 32,,820 # siberprop

5270-54070 2 spf SF 36 holes

Acidize 2500 gal, frac 125,799 gal Volomg, 150,517 # 16/30, 31,064# Siberprop

5570- 5740 2 spf SF 48 holes

Acidize 2500 gal, frac 124,761 gal Viking, 145,612# 16/30, 31,873 # Siberprop

Marker jt @ 4002'

PBTB - 5966'

700 sx 35/65/6 C, 400 50/50/2 C, circulated 334 sx.

5 1/2" 17# J-55 LT&C csg @ 6012'.

COG Operating LLC

Lease & Well #

Polaris B Federal # 26

Eddy County, NM

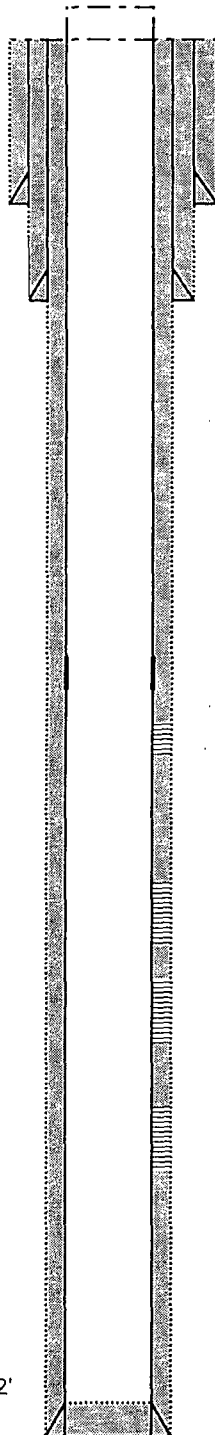
API # 30-015-36712

Sec 9 K T17S R30E 1650 FSL & 3210 FWL

Spud: 6/16/09

Elevation - 3685'

KB -



13 3/8" 48# H-40 STC csg @ 451', cmt w/300 sx Thixo, 300 sx lite, 448 sx C.
Circ 479 sx.

8 5/8" 24# J-55 LTC @ 1180', 400 sx 50/50/10 C, 200 C 2/5 cc, circ. 150 sx

Paddock

4414 - 4666 1 spf SF 29 holes

Acidized w/3,000 gal 15% NEFE

Frac w/103,181 gal Viking, 106,930# 16/30, 8,371# Super LC

Blinebry

4800 - 5000 1 spf SF 36 holes

Acidize 3500 gal, frac 125,074 gal Viking, 154,400 # 16/30, 28,780 # Super LC

5070-5270 2 spf SF 36 holes

Acidize 3500 gal, frac 124,236 gal Viking, 150,814 # 16/30, 31,375# Super LC

5340- 5540 2 spf SF 48 holes

Acidize 3500 gal, frac 124,461 gal Viking, 148,216# 16/30, 33,730 # Super LC

PBTD - 5962'

700 sx 35/65/6 C, 400 50/50/2 C, circulated 159 sx.

5 1/2" 17# J-55 LT&C csg @ 6007'.

COG Operating LLC

Lease & Well #

Polaris B Federal # 27

Eddy County, NM

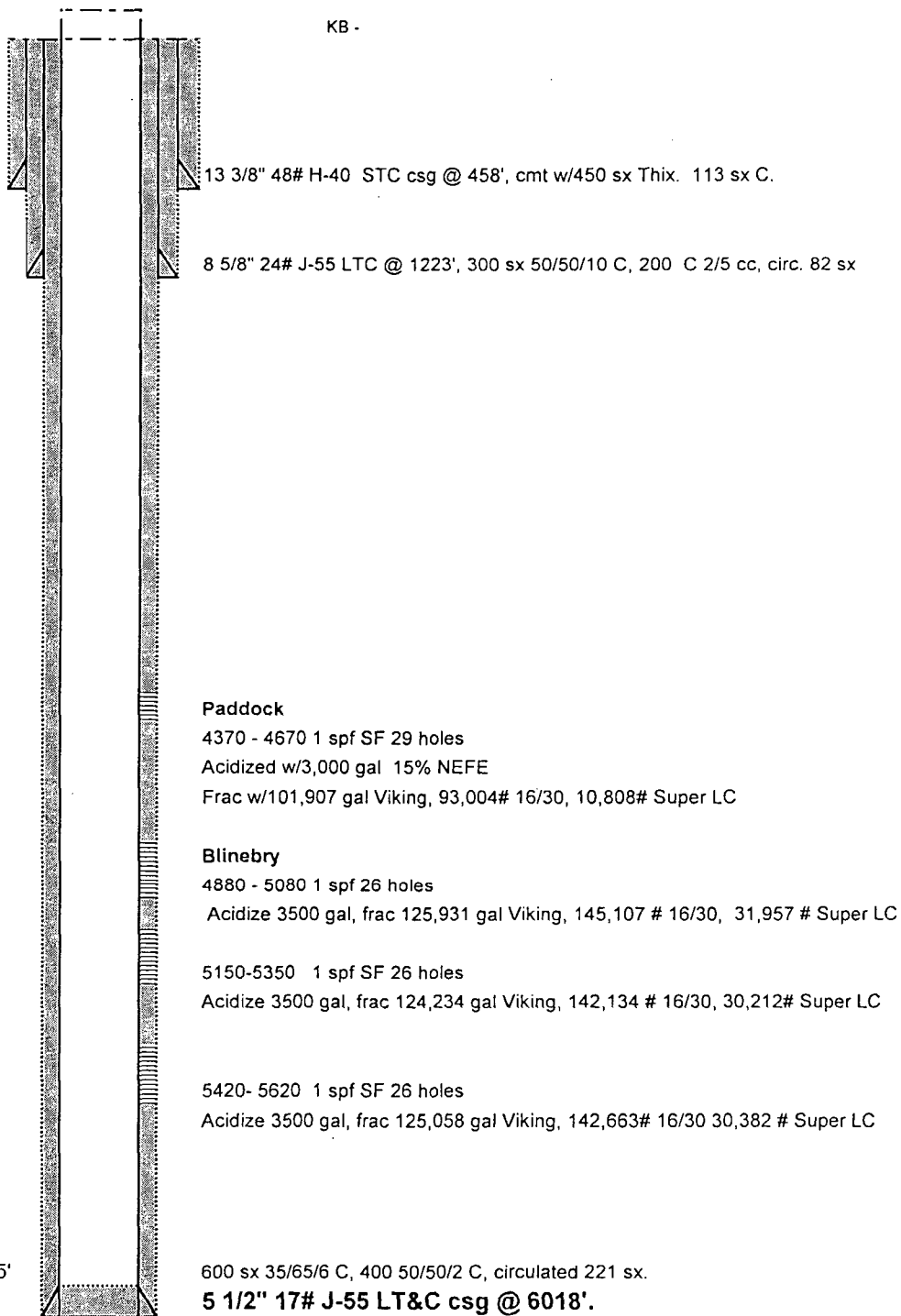
API # 30-015-36666

Sec 9 N T17S R30E790 FSL & 1650 FWL

Spud: 12/29/09

Elevation - 3696'

KB -



Marker jt @ 4017'

4/28/2010

XI0000004

SH



WELL CHRONOLOGY REPORT

WELL NAME : **POLARIS B FEDERAL #27** DIVISION: **NEW MEXICO** EVENT: **1**
 FIELD: **LOCO HILLS** LOCATION:
 COUNTY & STATE: **EDDY NM** CONTRACTOR: **SILVER OAK**
 WI %: AFE #: **POLARIS B FEDERAL #2** API #: **30-015-36666** PLAN DEPTH: **6,000** SPUD DATE: **12/21/2009**
 DHC: **\$555,500** CWC: **\$756,500** AFE TOTAL: **\$1,312,000** FORMATION: **GLORIETA YESO**

REPORT DATE: 01/12/2010 MD: **3,839** TVD: **3,839** DAYS: **6** MW: **8.9** VISC: **29**
 DAILY: DC: **\$17,180** CC: **\$0** TC: **\$17,180**
 CUM: DC: **\$257,975** CC: **\$0** TC: **\$257,975**

DAILY DETAILS:

DRLG F/ 2342'-2438'. 96' @ 77 FPH. WLS @ 2367'- 0.8 DEG. RIG SERVICE- FUNCTION TEST PIPE RAMS. RIG REPAIR- REPAIR WASHED UNION ON STANDPIPE. DRLG F/ 2438'-2916'. 478' @ 64 FPH. WLS @ 2844'- 1.5 DEG. DRLG F/ 2916'-3393'. 477' @ 71 FPH. WLS @ 3321'- 0.9 DEG. DRLG F/ 3393'-3839'. 446' @ 71 FPH.

REPORT DATE: 01/13/2010 MD: **4,796** TVD: **4,796** DAYS: **7** MW: **8.9** VISC: **29**
 DAILY: DC: **\$27,405** CC: **\$0** TC: **\$27,405**
 CUM: DC: **\$285,380** CC: **\$0** TC: **\$285,380**

DAILY DETAILS:

DRL 7-7/8" HOLE F/ 3839' - 3871' (32') @ 42.6 FPH. WLS @ 3800' = .6" DRL F/ 3871' - 3935' (64') @ 51.2 FPH. SERVICE RIG. ***FUNCTION PIPE RAMS***. DRL F/ 3935' - 3983' (48') @ 32 FPH. ROP DECREASING & DIFFERENTIAL PRESS DROPPING. PUMP SWEEP & CIRC HOLE CLEAN PRIOR T/ BIT TRIP. TOH SLM W/ BIT #3. NO DRAG. B/O BIT #3. M/U BIT #4. FUNCTION TEST MUD MTR. ***FUNCTION TEST BOP*** TIH W/ BIT #4 T/ 3908'. W&R F/ 3908' - 3983'. 10' OF FILL. DRL F/ 3983' - 4381' (398') @ 66.3 FPH. CIRC OUT SWEEP & WLS @ 4309' = .4" DRL F/ 4381' - 4796' (415') @ 61.4 FPH.

REPORT DATE: 01/14/2010 MD: **5,974** TVD: **5,974** DAYS: **8** MW: **8.9** VISC: **29**
 DAILY: DC: **\$22,680** CC: **\$0** TC: **\$22,680**
 CUM: DC: **\$308,060** CC: **\$0** TC: **\$308,060**

DAILY DETAILS:

DRL 7-7/8" HOLE F/ 4796' - 4859' (63') @ 84 FPH. WLS @ 4788 = .9" DRL F/ 4859' - 4987' (128') @ 51.2 FPH. SERVICE RIG. FUNCTION PIPE RAMS. DRL F/ 4987' - 5359' (372') @ 51.3 FPH. CIRC OUT SWEEP. WLS @ 5287' = .9" DRL F/ 5359' - 5847' (488') @ 54.2 FPH. WLS @ 5777' = .7" DRL F/ 5847' - 5974' (127') @ 50.8 FPH. RUN FLUID CALIPER @ 5910'. 1274 CU.FT. W/ AVR HOLE SIZE 8.375" & 22% O.T.H. WASHOUT @ 6018' TD.

REPORT DATE: 01/15/2010 MD: **6,023** TVD: **6,023** DAYS: **9** MW: **8.9** VISC: **29**
 DAILY: DC: **\$106,480** CC: **\$0** TC: **\$106,480**
 CUM: DC: **\$414,540** CC: **\$0** TC: **\$414,540**

DAILY DETAILS:

DRL 7-7/8" HOLE F/ 5974' - 6023' (49') @ 39.2 FPH. ***TD WELL @ 07:15 HRS MST 1/14/2010***. PUMP SWEEPS & CIRC HOLE CLEAN. SPOT HI-VIS PILL ON BOTTOM. R/U ALLENS L/D MACHINE WHILE CIRC. DROP TOTCO. ***NOTIFIED TONY TUCKER W/ BLM @ 08:00 HRS OF INTENT T/ RUN & CMT 5-1/2 PROD CSG***. LDDP. L/D BHA & BIT. RETRIEVE TOTCO. SURVEY @ 5951' = .5" R/D FLOWLINE. C/O OUT PIPE RAMS T/ 5-1/2". R/U ALLENS CSG CREW. P/U & RIH W/ 140 JTS 5-1/2" 17# J-55 LTC PROD CSG + 14.83' LANDING JT. TAG BOTTOM @ 6023'. P/U & SET PIPE @ 6018' (SHOE DEPTH). TOTAL PIPE = 6021.42'. MARKER JT @ 4017.58'. CIRC CSG WHILE R/D CSG CREW & L/D MACHINE. HPJSM & R/U BJ. MIX & PUMP 600 SXS, 12.6 PPG, 1.99 YLD, 213 BBL LEAD CMT SLURRY & 400 SXS, 14.0 PPG, 1.36 YLD, 97 BBL TAIL SLURRY @ 5 BPM. DISPLACE W/ 139 BBLS F/W @ 7 BPM. BUMP PLUG @ 20:40 HRS MST. FLTS HELD. CIRCULATED 221 SXS (78 BBLS) CMT T/ SURFACE. R/D BJ. BREAK BOLTS & LIFT BOP. SET 5-1/2" WELLHEAD SLIPS IN FULL TENSION (110K). FINISH N/D BOP'S. N/U WELLHEAD. JET & CLEAN PIPS. (TOTAL OF 18 BINS HAULED T/ CRI & 23 LOADS MUD HAULED T/ DISPOSAL). ***RELEASE RIG @ 03:00 HRS MST 1/15/10*** RIG DOWN BY HAND. MOVE TO ELECTRA FED #42 ON 1/16/10. ***FINAL REPORT F/ POLARIS B FED #27***



WELL CHRONOLOGY REPORT

WELL NAME : POLARIS B FEDERAL #27
FIELD : LOCO HILLS
COUNTY & STATE : EDDY NM
DIVISION : NEW MEXICO
LOCATION :
CONTRACTOR : SILVER OAK
EVENT : 1
WI % : AFE # : POLARIS B FEDERAL #2 API # : 30-015-36666 PLAN DEPTH : 6,000 SPUD DATE : 12/21/2009
DHC : \$555,500 **CWC :** \$756,500 **AFE TOTAL :** \$1,312,000 **FORMATION :** GLORIETA YESO

REPORT DATE: 01/07/2010 **MD:** 380 **TVD:** 380 **DAYS:** 1 **MW:** 8.9 **VISC:** 29
DAILY : DC: \$82,550 **CC:** \$0 **TC:** \$82,550
CUM : DC: \$82,550 **CC:** \$0 **TC:** \$82,550

DAILY DETAILS:

R/D ON MESILLA ST #10 AND MOVE SILVER OAK #5 TO POLARIS B FED 27. MOVE TO POLARIS B FED 27 AND RIG UP MIX SPUD MUD HOLD PER SPUD SAFETY MEETING. (NOTIFIED LEGION BRUMLEY W/BLM OF SPUD AND RUN 13 3/8" SURFACE CSG @ 13:30 MST 1/6/2010) DRLG 17 1/2" HOLE F/80' - 269' 189' @ 37.8/FPH. (SPUD 17 1/2" HOLE 21:30 MST 1/6/2010) W.L.S. @ 230' .1 DEG. DRLG 17 1/2" HOLE F/269' - 380' @ 34.1/FPH W/FULL RETURNS.

REPORT DATE: 01/08/2010 **MD:** 458 **TVD:** 458 **DAYS:** 2 **MW:** 8.9 **VISC:** 29
DAILY : DC: \$61,280 **CC:** \$0 **TC:** \$61,280
CUM : DC: \$143,830 **CC:** \$0 **TC:** \$143,830

DAILY DETAILS:

DRLG 17 1/2" HOLE F/380' - 458' 78' @ 22/FPH. (TD 17 1/2" HOLE @ 09:15 MST 1/7/10) PUMP HI VIS SWEEP AND CIRCULATE OUT UNTHAW FILL UP LINE AND SPOT PILL ON BOTTOM. TOOH L/D SHOCK SUB. CUT OFF CONDUCTOR AND R/U ALLENS CSG CREW. (HOLD SAFETY MEETING SLICK SURFACES PINCH POINTS 100% TIE OFF) RUN 11 JTS 13 3/8" 48# H-40 TOTAL PIPE 460.93' SET @ 458'. WASH 5' TO BOTTOM AND CIRCULATE CSG CAP @ 458'. (HOLD SAFETY MEETING W/BJ HIGH PRESSURE SLICK SURFACES PINCH POINTS) CEMENT 13 3/8" CSG TEST LINES TO 2500 PSI 10 BBL H2O SPACER 450 SX @ 14.8PPG DISPLACE W/66 BBLs H2O CHECK FLOATS OK CIRCULATE 113 SX TOTAL OF 27 BBLs TO PIT. (PLUG DOWN 15:15 MST 1/7/10) WOC. (CEMENT FELL BACK 16') CUT OFF CSG AND WELD ON 13 3/8" WELL HEAD. N/U BOPE. R/U TESTERS TEST BLIND RAMS PIPE RAMS CHOKE MANIFOLD AND UPPER AND LOWER KELLY VALVES TO 250 LOW AND 1000 PSI HIGH. FINISH N/U FLOW LINE. P/U 11" BHA AND TIH THAWING OUT ICE PLUGS IN DCS.

REPORT DATE: 01/09/2010 **MD:** 1,100 **TVD:** 1,100 **DAYS:** 3 **MW:** 9.8 **VISC:** 29
DAILY : DC: \$16,380 **CC:** \$0 **TC:** \$16,380
CUM : DC: \$160,210 **CC:** \$0 **TC:** \$160,210

DAILY DETAILS:

TOH TO P/U SHOCK SUB. THAW OUT MUD LINE FROZEN FROM 4" VALVE ON RIG FLOOR BACK TO 4" VALVE ON #1 PUMP. P/U SHOCK SUB AND TIH TO 412'. P/U ROTATING HEAD AND INSTALL KELLY DRIVE BUSHING. DRLG CEMENT AND FLOAT EQUIPMENT F/412' TO 458'. DRLG 11" HOLE F/458' - 714' 256' @ 64/FPH. (DRILL 11" HOLE @ 18:30 MST 1/8/10) THAW OUT AIR LINES. DRLG 11" HOLE F/714' - 778' 64' @ 85.3/FPH. W.L.S. @ 738' 1.4 DEG. DRLG 11" HOLE F/778' - 1064' 286' @ 76.2/FPH. W.L.S. @ 1024' 2.3 DEG. DRLG 11" HOLE F/1064' - 1100' 36' @ 64/FPH.

REPORT DATE: 01/10/2010 **MD:** 1,224 **TVD:** 1,224 **DAYS:** 4 **MW:** 9.8 **VISC:** 29
DAILY : DC: \$53,155 **CC:** \$0 **TC:** \$53,155
CUM : DC: \$213,365 **CC:** \$0 **TC:** \$213,365

DAILY DETAILS:

DRLG 11" HOLE F/1100' - 1224' 124' @ 31/FPH. (TD 11" HOLE @ 10:00 MST 1/9/10) SERVICE RIG. CHECK ROTARY DRIVE BEARING IS OUT. (GOT THE OK FROM TERRY CARTWRIGHT W/BLM TO SET 8 5/8" @ 1224') PUMP HI VIS SWEEP AND CIRCULATE OUT DROP TOTCO. TOH L/D 8" DCS AND SHOCK SUB. R/U ALLENS CSG CREW CHANGE OUT RAMS. (HOLD SAFETY MEETING PINCH POINTS 100% TIE OFF SLICK SURFACES) RUN 27 JTS 8 5/8" 24# J-55 TOTAL PIPE 1224.87' SET @ 1223'. CIRCULATE CSG CAP. (HOLD SAFETY MEETING W/BJ HIGH PRESSURES PINCH POINTS AND SLICK SURFACES) TEST LINES TO 2500 PSI OK PUMP 10 BBLs H2O SPACER LEAD 300 SX @ 11.8 PPG TAIL 200 SX @ 14.8 PPG DISPLACE W/75 BBLs H2O PLUG DOWN @ 17:30, MST 1/9/10, CHECK FLOAT OK CIRCULATED 82 SX TOTAL OF 36 BBLs TO PIT. N/D BOPE SET SLIPS ON 8 5/8" CSG W/30K. CUT OFF 8 5/8" CSG AND WELD ON 8 5/8" WELL HEAD. (PULL ROTARY DRIVE IN PUT SHAFT AND SEND TO HOBBS TO MACHINE SHOP) N/U BOPE. TEST BLIND RAMS PIPE RAMS CHOKE MANIFOLD AND UPPER AND LOWER KELLY VALVES AND ALL FLOOR RELATED VALVES TO 250 LOW AND 2000 HIGH. WOC.

REPORT DATE: 01/11/2010 **MD:** 2,342 **TVD:** 2,342 **DAYS:** 5 **MW:** 9.1 **VISC:** 29
DAILY : DC: \$27,430 **CC:** \$0 **TC:** \$27,430
CUM : DC: \$240,795 **CC:** \$0 **TC:** \$240,795

DAILY DETAILS:

P/U 7 7/8" BHA AND TIH. WOC. WOC/ RIG SERVICE. RIG REPAIR- REPLACE ROTARY INPUT BUSHING. DRLG CMT & FLT EQUIP. DRLG F/ 1224'-1513'. 289' @ 96 FPH. WLS @ 1441' @ 1.4 DEG. DRLG F/ 1513'-1666'. 153' @ 102 FPH. C/O PUMPS. DRLG F/ 1666'-1960'. 294' @ 90 FPH. WLS @ 1888' @ 0.5 DEG. DRLG F/ 1960'-2341'. 381' @ 102 FPH. REPLACE SWAB IN PUMP. DRLG F/ 2311'-2342'.

COG Operating LLC

ACTIVE

Lease & Well #
API # 30 015 36663

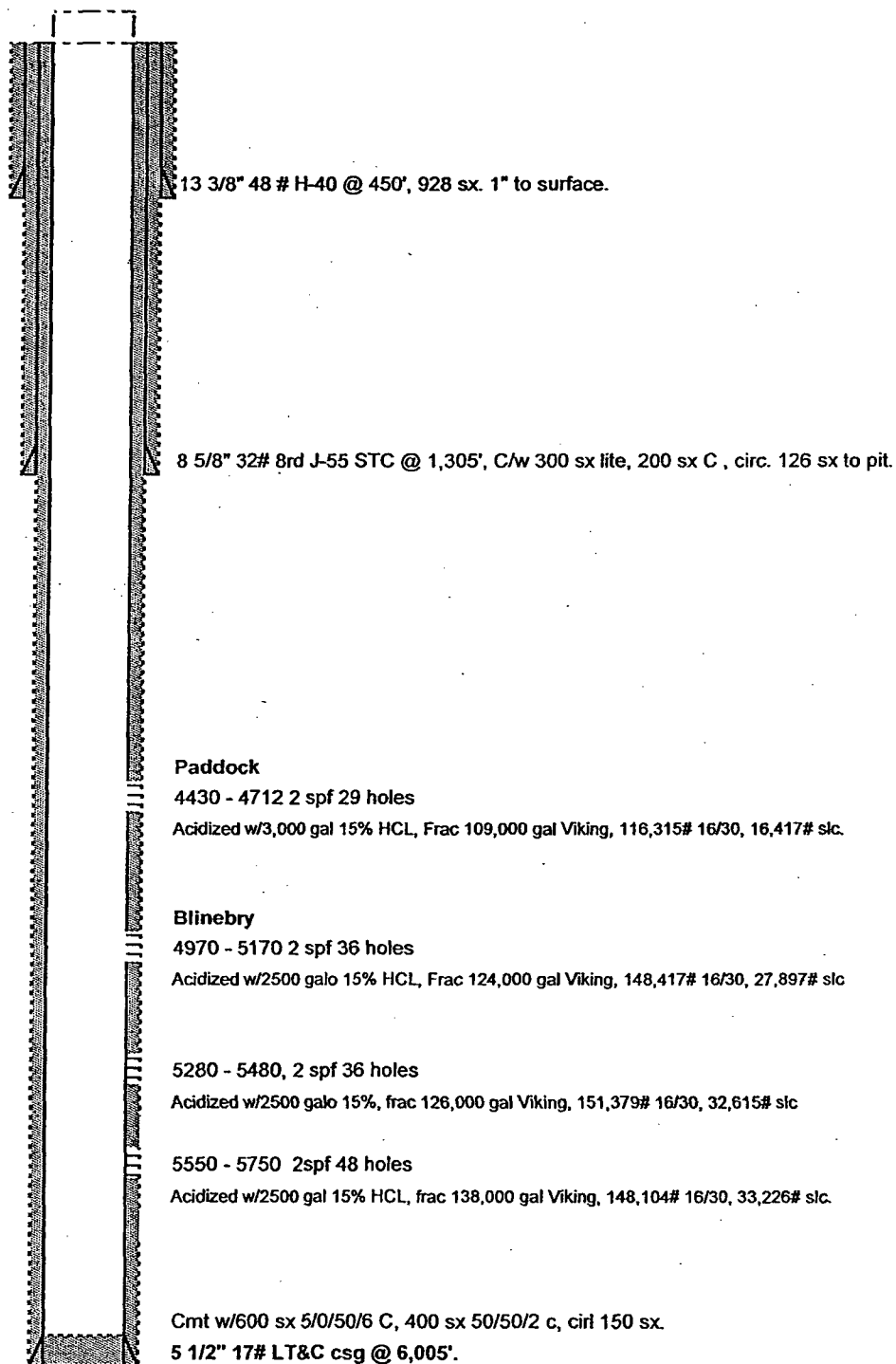
Polaris B Fed #31

SPUD - 10/6/06

Lea Co., NM

Sec 9 P T17S R30E 330 FSL & 330 FEL

Elevation - 3696'



COG Operating LLC

ACTIVE

Lease & Well #
API# 30 015 35430

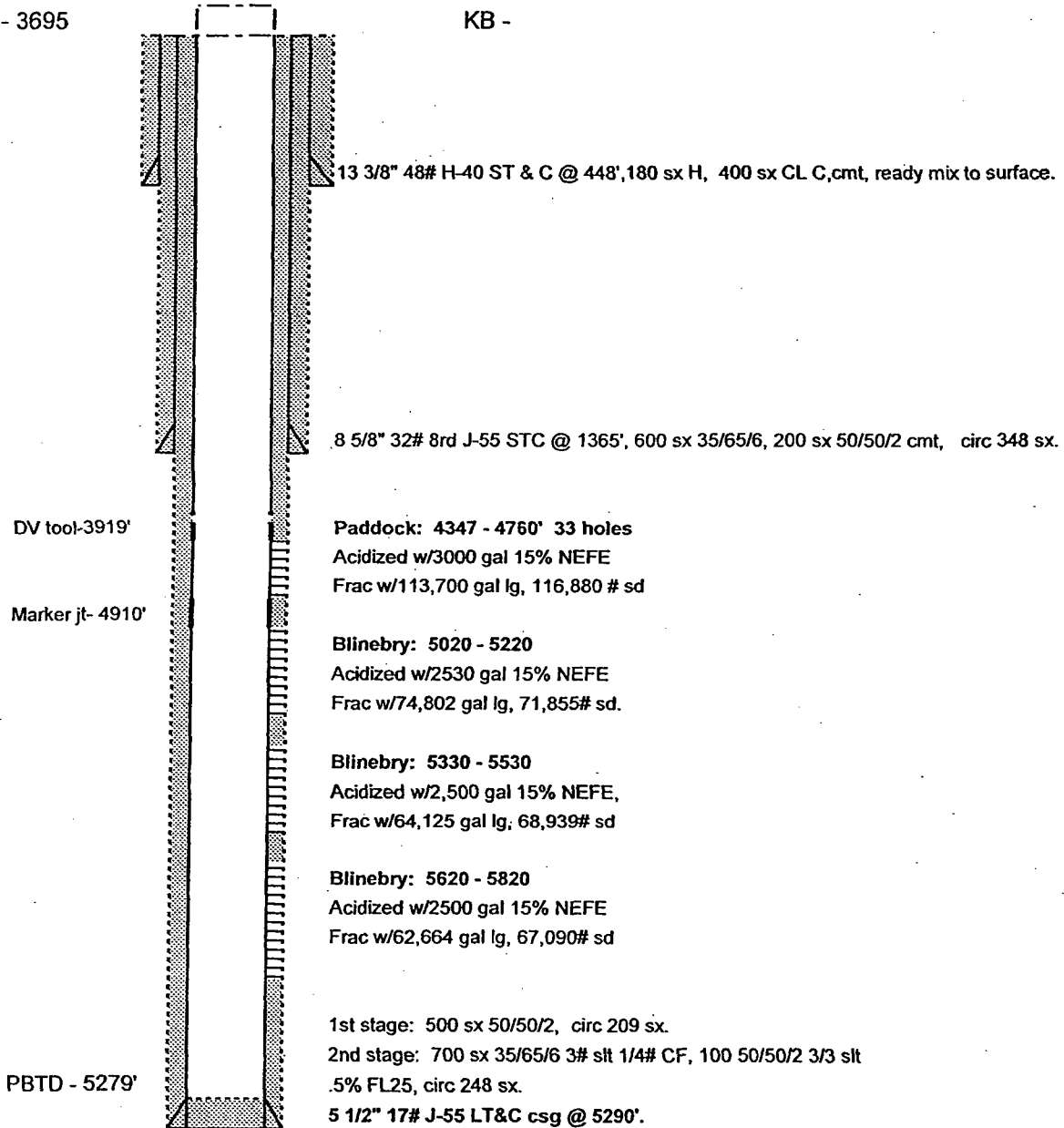
Electra Federal #15

Eddy Co., NM
Sec 10 M T17S R30E 330 FSL & 330 FWL

SPUD - 9/17/07

Elevation - 3695

KB -



COG OPERATING LLC

Lease & Well # Electra Federal #4

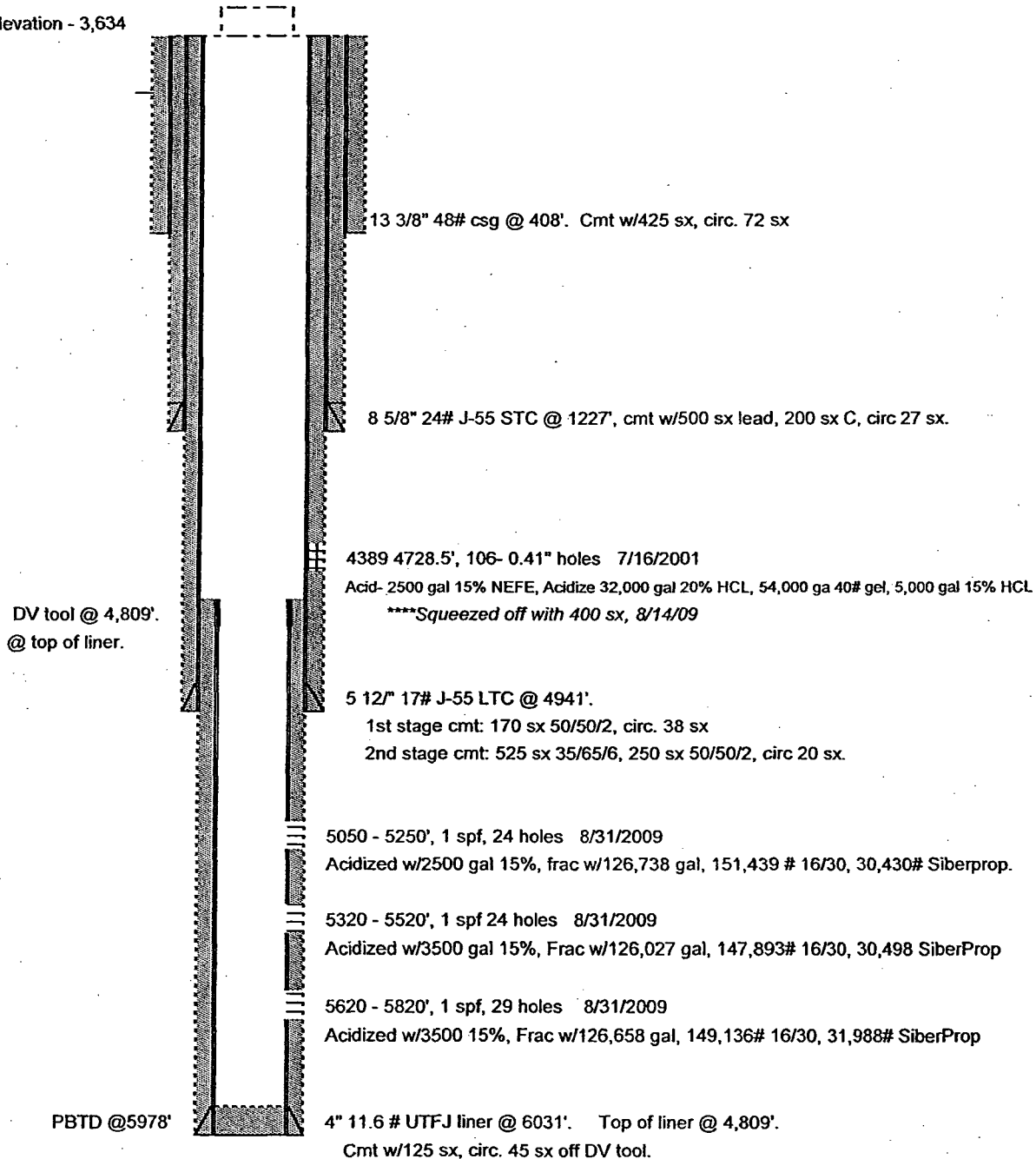
API # 30-015-31776

Eddy County, NM

Sec 15 E T17S R30E 1650 FNL 330 FWL

Spud: 7/9/2001

Elevation - 3,634



COG Operating LLC

Lease & Well #
30 015 35783

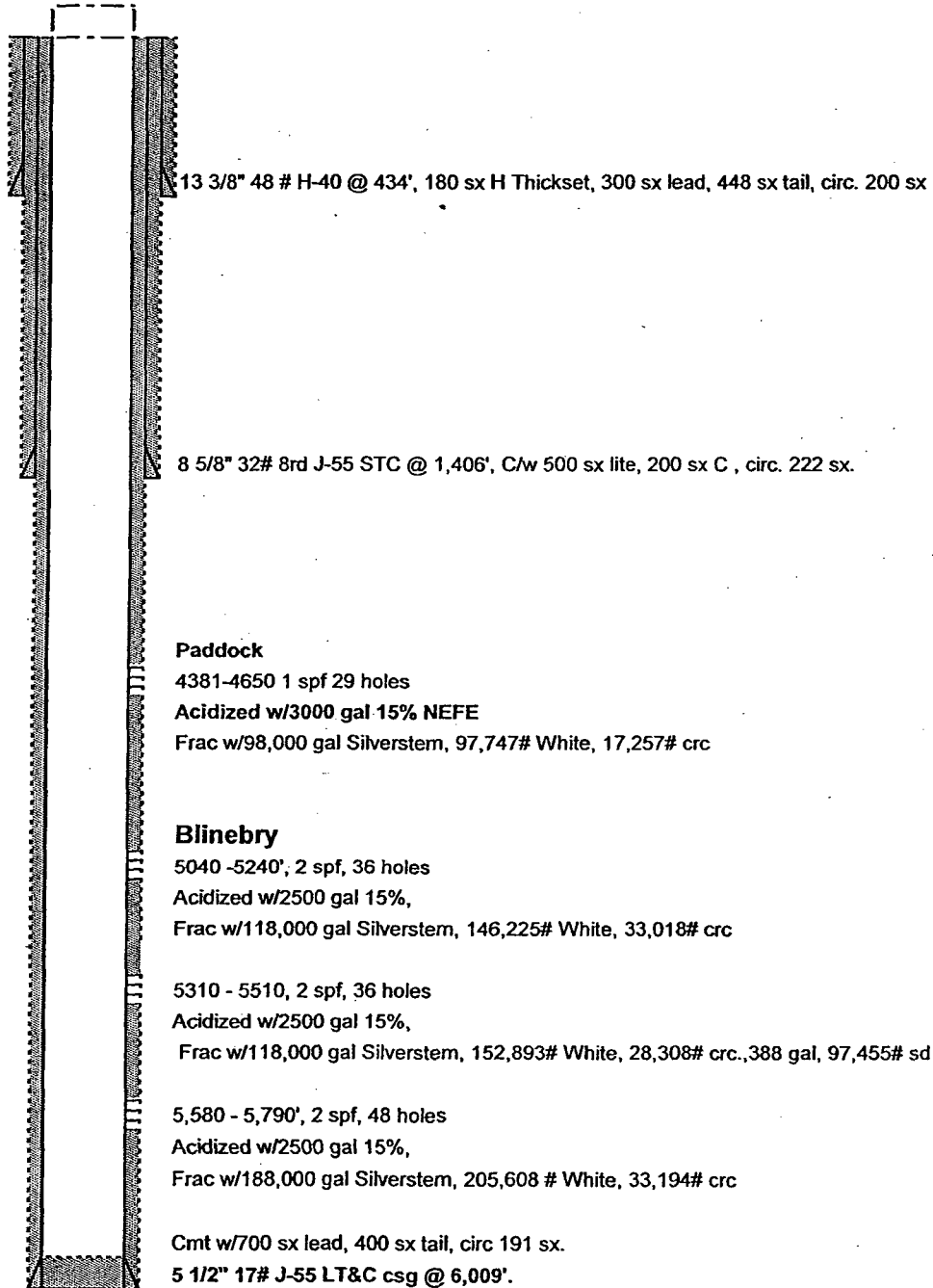
Electra Federal #18

Spud - 5/6/2009

Eddy Co., NM

Sec 15 T17S R30E 2310 FNL & 330 FWL

Elevation - 3685' GL



PBTD- 5,916'

COG Operating LLC

Lease & Well #
API # 30 015 36272

Electra Federal #24

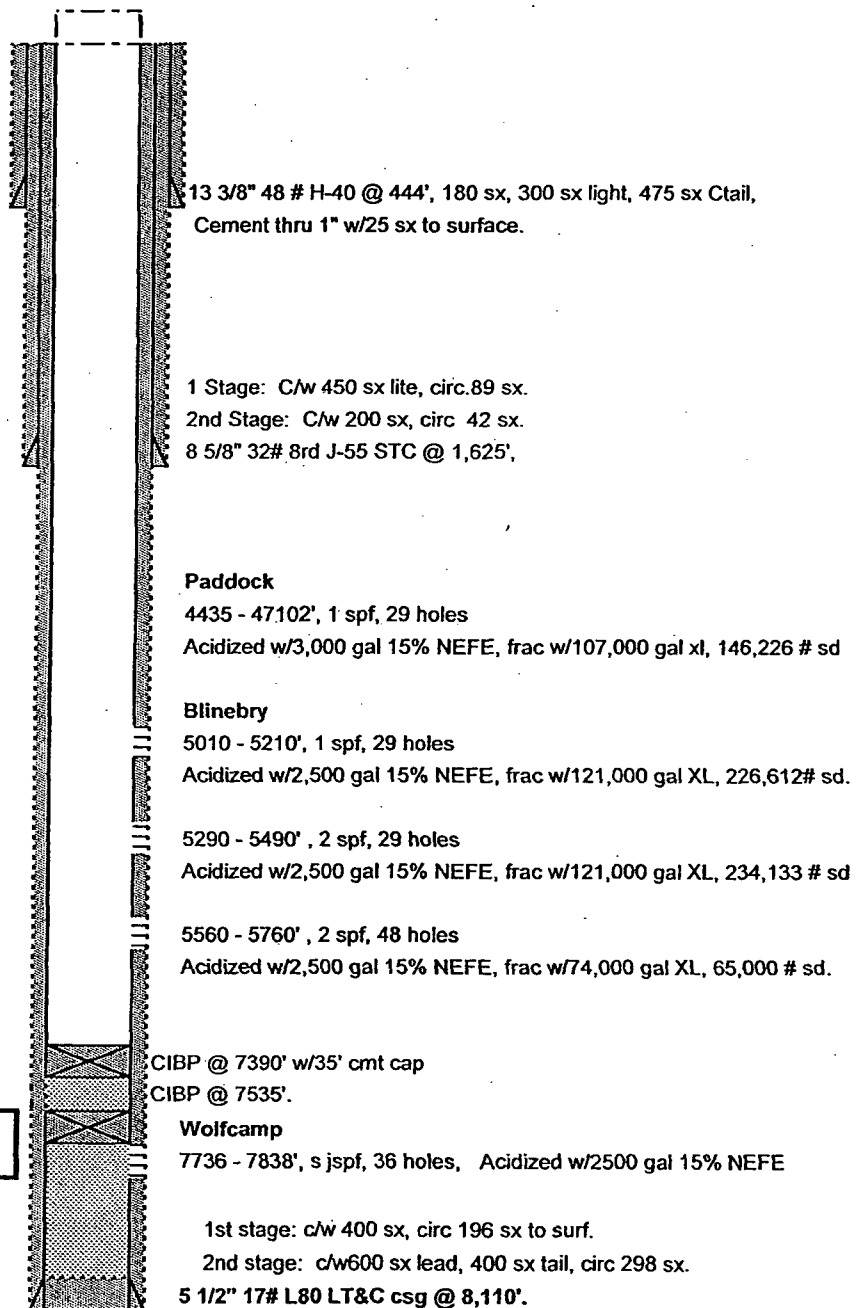
ACTIVE

SPUD- 8/19/2008

Eddy Co., NM

Sec 15 D T17S R30E 330 FNL & 330 FWL

Elevation - 3688' GR



Cut window 7522-7528,
Drilled to MD-9600',
TVD-7,801'.

5 stage wolfcamp frac, 8112 - 9670'.

COG Operating LLC

Lease & Well #
API # 30 015 37082

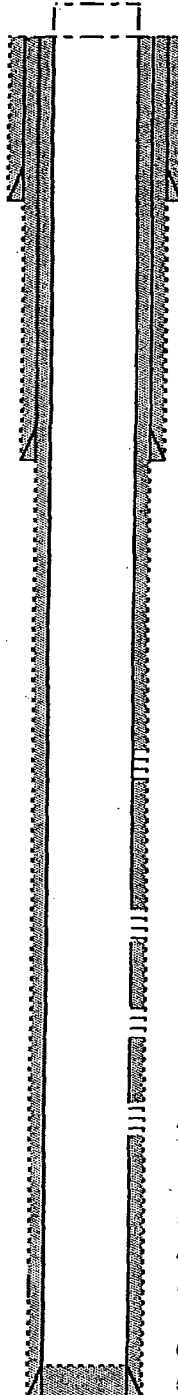
Electra Federal #39

SPUD- 12/15/2009

Eddy Co., NM

Sec 15 T17S R30E 330 FNL & 330 FWL

Elevation - 3685' GR



13 3/8" 48 # H-40 @ 444', 300 sx, 250 sx light, 450 sx C tail,
Cement thru 1" w/300 sx to surface.

Cmt w/800 sx C, d/c circ, 1" to surface w/150 sx.
8 5/8" 32# 8rd J-55 STC @ 1,306',

Marker jt @ 4,000'.

Paddock

4420 - 4730', 1 spf, 29 holes
Acidized w/3,000 gal 15% NEFE,
Frac w/103,396 gal Silverstem, , 124,532 # 16/30, 19,253# Siberprop

Blinebry

5070 - 5270', 1 spf, 26 holes
Acidized w/3,500 gal 15% NEFE,
Frac w/114,460 gal, 149,055# 16/30, 31,1820# Siberprop.

53400 - 5540' , 1 spf, 26 holes
Acidized w/2,500 gal 15% NEFE,
Frac w/114,067 gal Silverstem, 149,955 # 16/30, 27,886# Siberprop

5610 - 5810' , 1 spf, 26 holes
Acidized w/2,500 gal 15% NEFE,
Ffrac w/114,908 gal Silverstem, 146,214 # 16/30, 35,252# Siverprop

Cmt w/550 sx lead, 400 sx tail, circ 220 sx
5 1/2" 17# L80 LT&C csg @ 6,002'.

COG OPERATING LLC

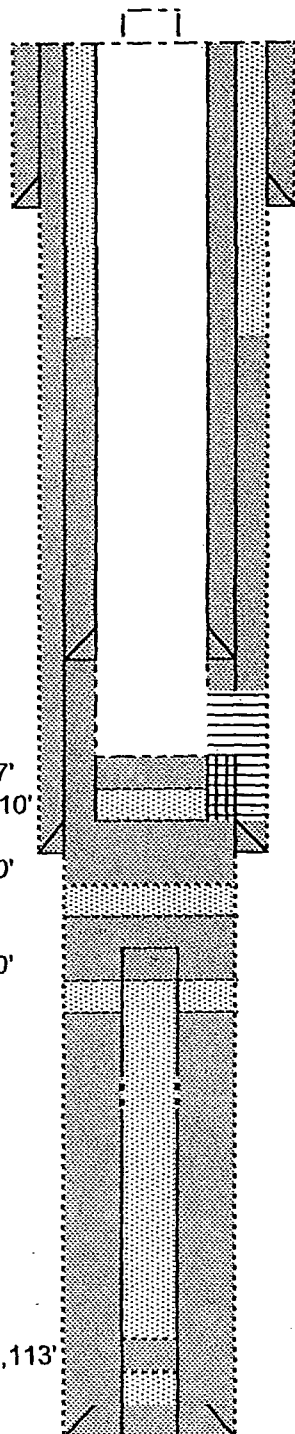
Lease & Well #
API # 30-015-10046

ETZ State Unit # 106

1980 FNL & 1980 FWL
Sec 16 F T 17S R 30E
Eddy Co., NM

Elevation - 3671

KB -



16" 65# H-40 STC csg @ 341', 400 sx circ..

TOC @ 1020', TS

4/14/1973

GB/SA perfs: 2536 - 3892'

Acidized 1000 gal, frac 20,000 gal,

20,000# sd

11/10/1984

5 1/2" K-55 15.5# csg, 2313', 400 sx CI C

Circ 5 sx, pmp 100 sx dn bradenhead.

(Drilled out to 3910')

Mar-89

GB perfs: 2552 2772', 21 holes

3/20/1989

acidized 1000 gal 15% HCL.

3404 - 3740' 20 HOLES in 8 5/8" csg, April 1972

Frac'd w/40,000 gal, 40,000# sd.

67 sx plug 2770 - 3047'
PBTD - 3910'

70 sx plug 3915 - 4100'

8 5/8" 24# J-55 Stc @ 4000', DV tool @ 1943'

1st stage: 650 sx, circ ?

2nd stage: 550 sx, TOC 1020', temp sur.

35 sx plug 4550 - 4650'

3 1/2" csg cut off at 4650'.

TOC - 4712, temp sur.

DV tool @ 8332'

Perfs 11,102 - 11,143'

Morrow

25 sx plug 10,600 - 11,113'

3 1/2" 9.2# N-80 Butress @ 11,300

COG OPERATING LLC

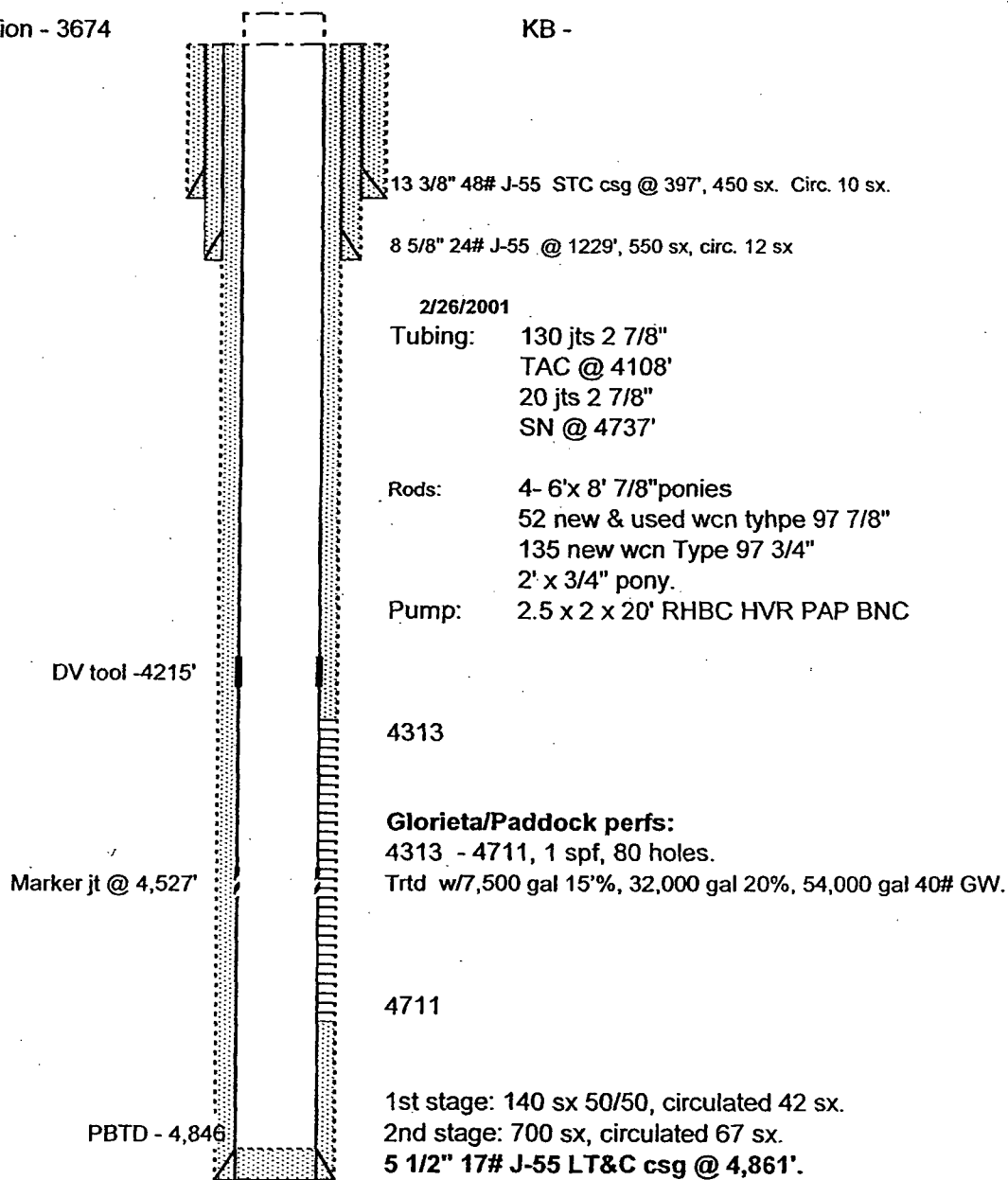
Lease & Well #
API# 30-015-31491

Houma State #1

Active
Sec 16 F T 17S R 30E

Elevation - 3674

KB -



COG Operating LLC

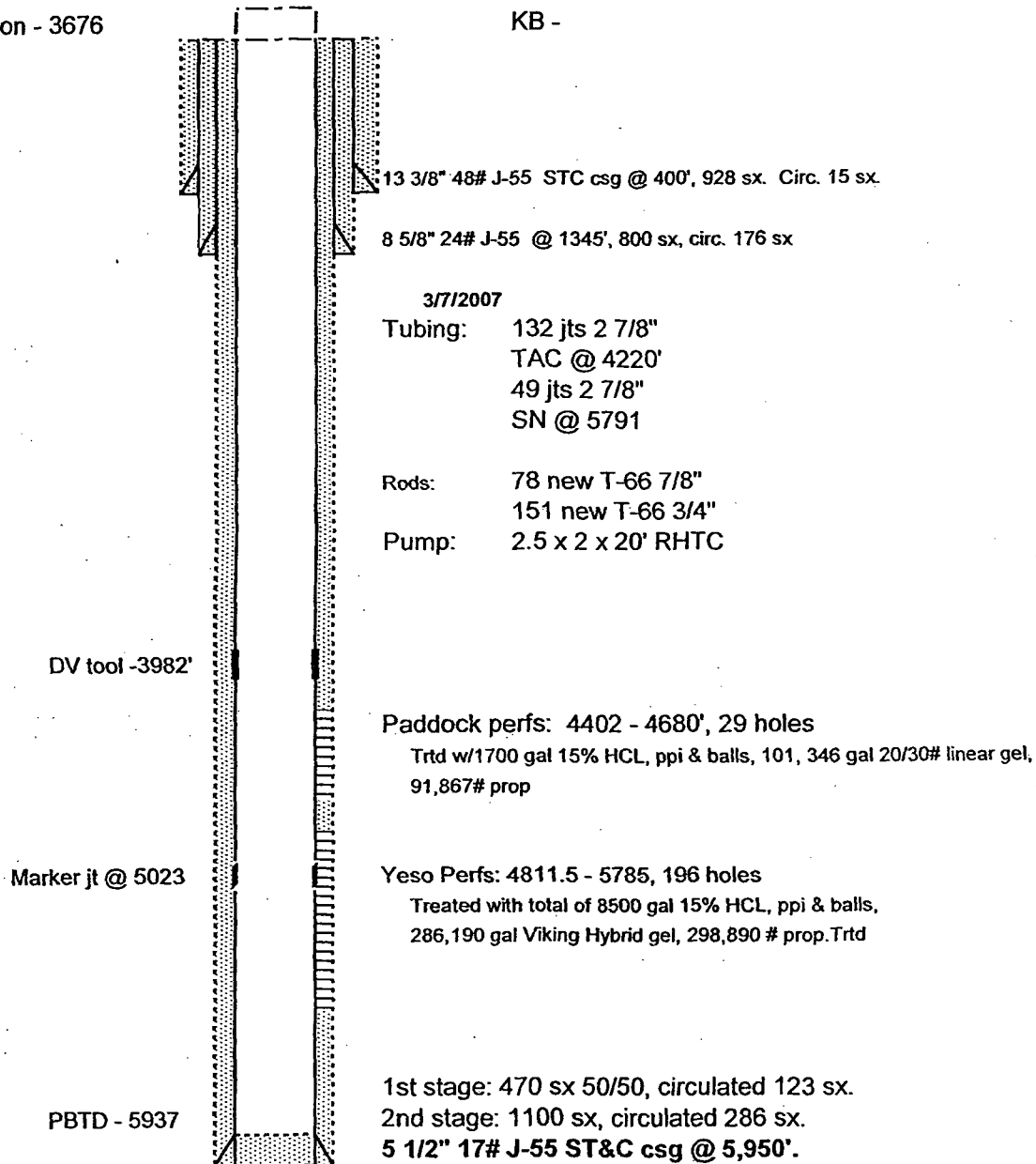
Lease & Well #
API# 30-015-31578

Houma State #2

Active
Sec 16 F T 17S R 30E

Elevation - 3676

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35256

Houma State #3

Active
Sec 16 E T 17S R 30E

Elevation - 3672

KB -

TOC @ surface.

DV tool -3872'

Marker jt @ 5004

PBTD - 6012

13 3/8" 48# H-40 STC csg @ 414', 930 sx.
D/N circulate, had to 1".
8 5/8" 32# J-55 @ 1370', 800 sx, circ. 232 sx

8/20/2007

Tubing: 139 jts 2 7/8"
TAC @ 4217
43 jts 2 7/8"
1 jt Endurance tbg 2 3/8"
SN @ 5638'
4' perf sub
1 jt 2 7/8" mud jt w/bp

Rods: 1 1/4" x 26' PR
2- 4'x 7/8" ponies
88 new T-66 7/8"
123 new T-66 3/4"
2'- 3/4" pony
12- 7/8" T-66

Pump: 2.5 x 2 x 20' RHBC=HVR

Paddock perms: 4291 - 4605' 32 holes

Trtd w/2500 gal HCL, ppi, balls, 99,438 gal linear gel,
98,200# prop.

Perfs 4755 - 4859', 22 holes, Acidized w/1675 gal, not fraced.

Perfs 4973 - 5617', 84 holes.

Trtd w/3250 gal HCL, ppi, balls, 180,00 gal linear gel,
194,439 # prop, 2 stages.

1st stage: 500 sx 50/50, circulated 90 sx.

2nd stage: 1100 sx, circulated 220 sx.

5 1/2" 17# J-55 LT&C csg @ 6,026'.

COG Operating LLC

Lease & Well #

Houma State #4

API# 30 15 35767

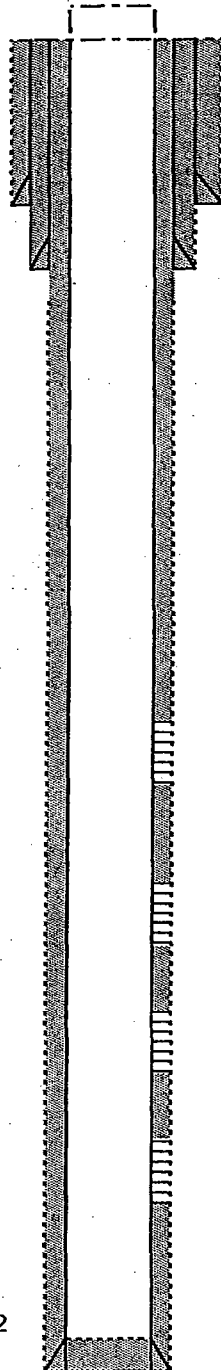
Eddy County, NM

Sec 16 E T17s R30E, 2310 FNL & 990 FWL

Spud - 10/31/2007

Elevation - 3672

KB -



13 3/8" 48# H-40 STC csg @ 439', 447 sx. C, circ 127 sx.

8 5/8" 32# J-55 @ 1347', 600 sx lite lead, 200 C tail, circ. 103 sx

4338 - 4647 1 spf 33 holes

Acidized w/3000 gal 15% NEFE

Frac w/114,836 gal XL, 114,836# 16/30 white, 15,000 # siberprop

4880 - 5080 36 holes

Acidized w/2520 gal 15% NEFE

Frac w/62,076 gal gel, 84,002 # 16/30

5140 - 5340 36 holes

Acidized w/3948 gal 15% NEFE

Frac w/66,444 gal gel, 87,246# 16/30

5540 - 5740, 2 spf, 48 holes

Acidized w/4956 gal 15% NEFE

Frac w/65,772 gal gel, 93,183# 16/30

PBTD - 6012

Cmt/w 700 sx C lead, 400 sx C Tail, Circ 372 sx.

5 1/2" 17# J-55 LT&C csg @ 5,916'.

COG Operating LLC

Lease & Well #

Houma State #5

API# 30 15 36494

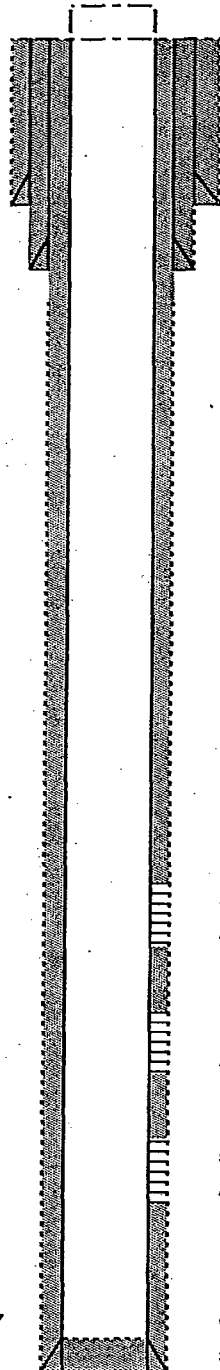
Eddy County, NM

Sec 16 E T17S R30E, 1650 FNL & 990 FWL

Spud - 1/19/2009

Elevation - 3682

KB -



13 3/8" 48# H-40 STC csg @ 422', 300 sx. lead, 230 tail, circ 212 sx.

8 5/8" 32# J-55 @ 1278', 300 sx lite lead, 200 C tail, circ. 77 sx

4800 - 5000 36 holes

Acidized w/2500 gal 15% NEFE

Frac w/3,968 bbl gel, 269,169 # 16/30

5070 - 5270 2 spf 36 holes

Acidized w/2500 gal 15% NEFE

Frac w/3,943 bbl gel, 261,172# 16/30

5340 - 5540, 2 spf, 48 holes

Acidized w/2500 gal 15% NEFE

Frac w/1,066 bbl gel, 4,543# 16/30 sd

PBTD - 5967

Cmt/w 600 sx C lead, 400 sx C Tail, Circ 136 sx.

5 1/2" 17# J-55 LT&C csg @ 6,009'.

COG OPERATING LLC

Lease & Well #
30 015 36495

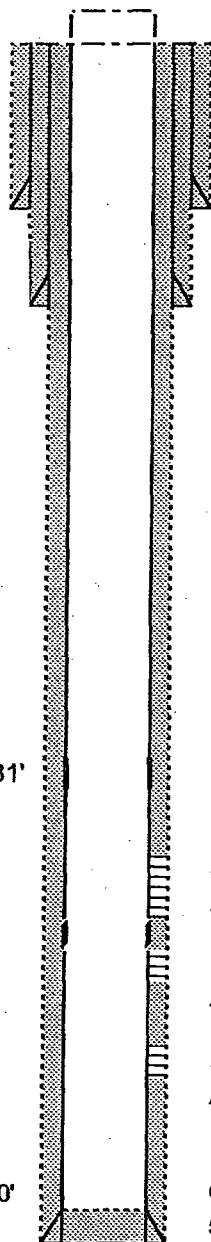
Houma State #6

Eddy Count, NM
Sec 16 T17S R30E 2310 FNL & 330 FWL

Spud 11/2/2008
Elevation - 3678'

Marker jt @ 3581'

PBTD - 5,970'



13 3/8" 48# dH-40 STC csg @ 424', 180 Thix, 300 sx., 450 sx tail.
Ready mix to surface.

8 5/8" 32# J-55 @ 1306', 400 sx lead, 200 sx tail, circ. 176 sx

Blinebry

4750 - 4950, 32 holes

Acidized w/3000 gal 15%, Frac w/2,910 bbl gel, 204,653 # sd

5020-5220, 32 holes

Acidized w/2500 gal 15%, Frac w/2,803 bbl bel, 178,591# sd

5320 - 5520', 48 holes

Acidized w/2500 gal 15%, Frac w/2819 bbl gel, 178,684# sd

Cmt w/700 lead, 400 tail, circ 383 sx.

5 1/2" 17 # J-55 LT&C csg @ 6,017'.

COG OPERATING LLC

Lease & Well #
30 015 36496

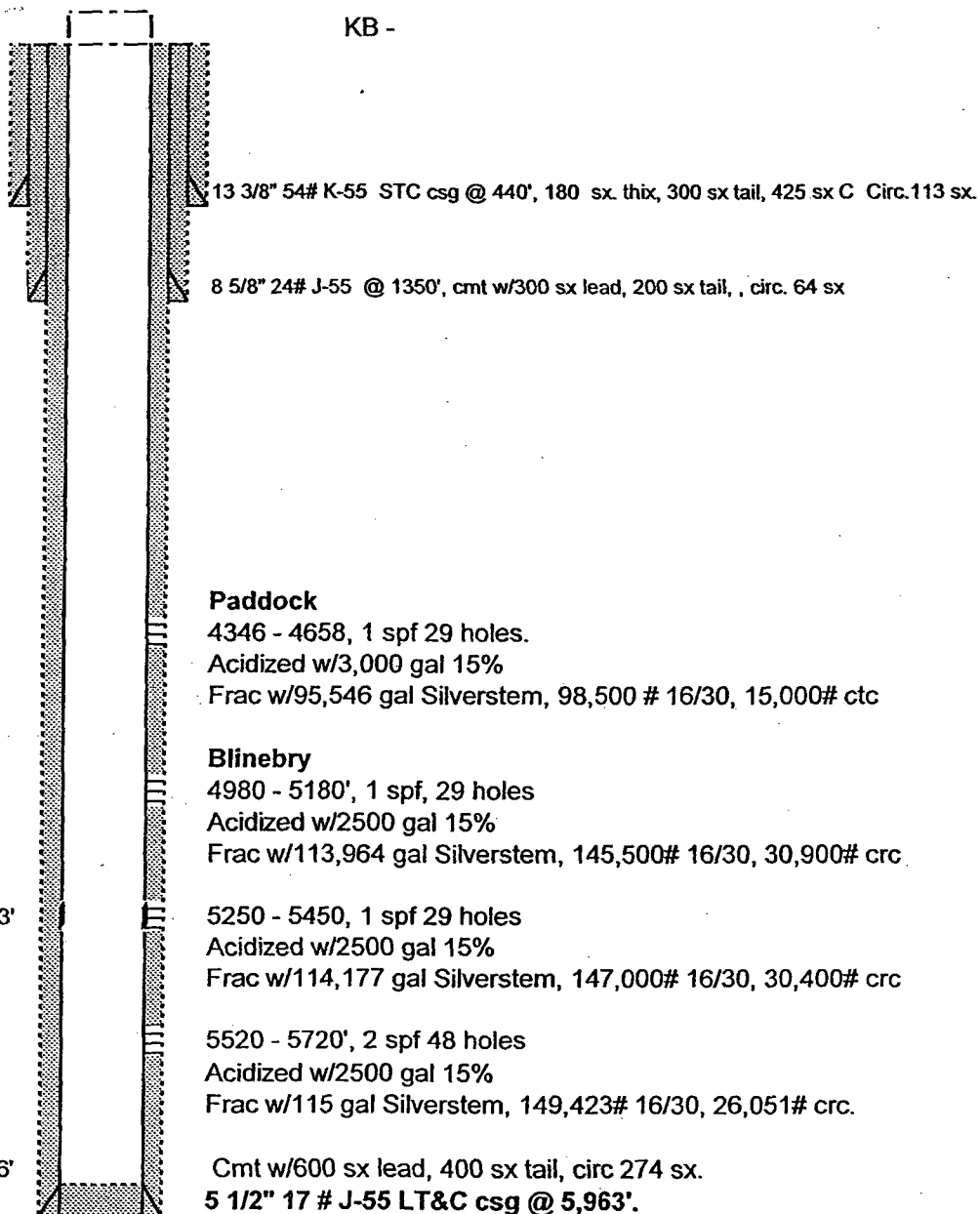
Houma State #7

Eddy County, NM
Sec 16 F T17S R30E 1450 FNL & 2310 FWL

Spud - 3/8/09

Elevation - 3685'

KB -



COG OPERATING LLC

Active

Lease & Well #
30 015 36477

Houma State #8

Eddy County, NM
Sec 16 F T17S R30E 2270 FNL & 1650 FWL

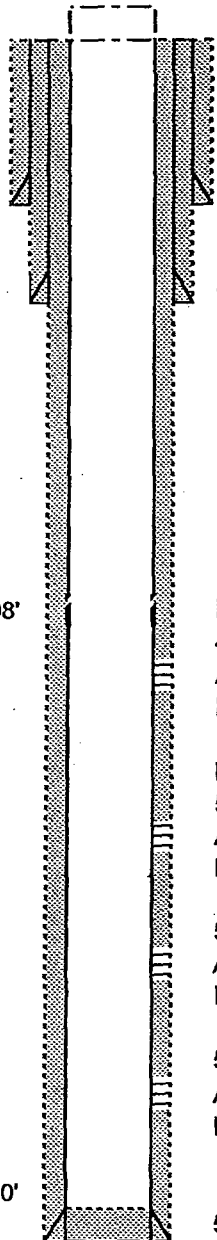
Spud - 4/21/09

Elevation - 3680'

KB -

Marker jt @ 4,008'

PBTD - 5,940'



13 3/8" 48# H-40 STC csg @ 440', 448 sx C Circ. 83 sx.

8 5/8" 24# J-55 @ 1310', cmt w/300 sx lead, 200 sx tail, , circ. 80 sx

Paddock

4352 - 46168, 1 spf 29 holes.

Acidized w/3,000 gal 15%

Frac w/104,000 gal Silverstem, 111,200 # 16/30, 24,400# ctc

Blinebry

5100 - 4900', 2 spf, 36 holes

Acidized w/2500 gal 15%

Frac w/116,100 gal Silverstem, 147,100# 16/30, 34,100# crc

5170 - 5370, 2 spf 36 holes

Acidized w/2500 gal 15%

Frac w/113,000 gal Silverstem, 142,800# 16/30, 29,200# crc

5440 - 5640', 2 spf 48 holes

Acidized w/2500 gal 15%

Frac w/116,000 gal Silverstem, 144,600# 16/30, 33,400# crc.

Cmt w/600 sx lead, 400 sx tail, circ 306 sx.

5 1/2" 17 # J-55 LT&C csg @ 6,003'.

COG Operating LLC

Lease & Well #
API# 30-015-31019

Imperial State # 4

Active
Sec 16 J T 17S R 30E

Elevation - 3679'

KB -

5 1/2" csg, TOC @ surface

DV tool -4228

Marker jt @ 4495'

9/13/07: cleaned out to 4830'.
PBTD - 4859

13 3/8" 48# K-55 STC csg @ 432', 450 sx. Circ 122 sx

8 5/8" 24# 8rd J-55 STC @ 1169, 525 sx, circ. 42 sx

9/31/07
Tubing: 130jts 2 7/8" EUE 8rd
1- 2'x 2 7/8" tbg sub
2 jts 2 7/8" tbg
TAC @ 4137'
19 jts 2 7/8"
SN @ 4733'

Rods: 1 1/4" PR w 8' PRL
2"- 7/8" pony
59- wcn 7/8"
129- new 97 3/4"
2'- 3/4" pony

Pump: 2.5 x 2 x16' RHBC BNC PAP

4327.5

Paddock perms:
4327.5 - 4708', 88 holes

Acidize: 3900 gal

Acidize: 32,000gals 20% Acid htd, 54,000gals 40#gel htd, 5000gals cool down acid

Frac w/2500 gal HCL, 118,000 gal 30/40# LG, 100,360# prop.

4708

1st stage: 130 sx 50/50, circulated 62 sx.
2nd stage: 725 sx, circulated 84 sx.
5 1/2" 17# J-55 LT&C csg @ 4873'.

COG Operating LLC

Lease & Well #
API# 30-015-34866

Imperial State # 5

Active
Sec 16 J T 17S R 30E

Elevation - 3676

KB -

5 1/2" csg, TOC @ surface

DV tool -4028

Marker jt @ 5007'

PBTD - 5949

13 3/8" 48# h-40 STC csg @ 407', 905 sx.
d/n circ., ready mix to surface.
8 5/8" 32# 8rd J-55 STC @ 1241, 800 sx, circ. 94 sx

9/31/07
Tubing: 132jts 2 7/8" EUE 8rd
TAC @ 4159'
52 jts 2 7/8"
SN @ 5795

Rods: 1 1/4" PR w 8' PRL
6', 8'- 7/8" ponies
63- wcn 7/8"
164- new 97 3/4"
2'- 3/4" pony

Pump: 2.5 x 2 x20' Trash pump

4337 Paddock perms:
4337 - 4721', 72 holes
Acidize: 3000 gal, PPI, balls
4721 Frac w/93,866 gal Viking Hybrid, 98,496# prop.

5100-.5 Blinbry perms:
5100.5 - 5494', 52 holes
Acidize w/ 2500 gal, PPI balls
5494 Frac w/98,238 gal Viking Hybrid, 98,682 # prop

5578 5578 - 5769', 52 holes
Acidize w/2500 gal, PPI, balls
Frac w/97, 524 gal Viking Hybrid, 98, 673 # prop

5769

1st stage: 500 sx 50/50, circulated 80 sx.
2nd stage: 920 sx, circulated 96 sx.
5 1/2" 17# J-55 LT&C csg @ 5962'.

COG OPERATING LLC

ACTIVE

Lease & Well #
API # 30 015 31367

Mesilla State #1

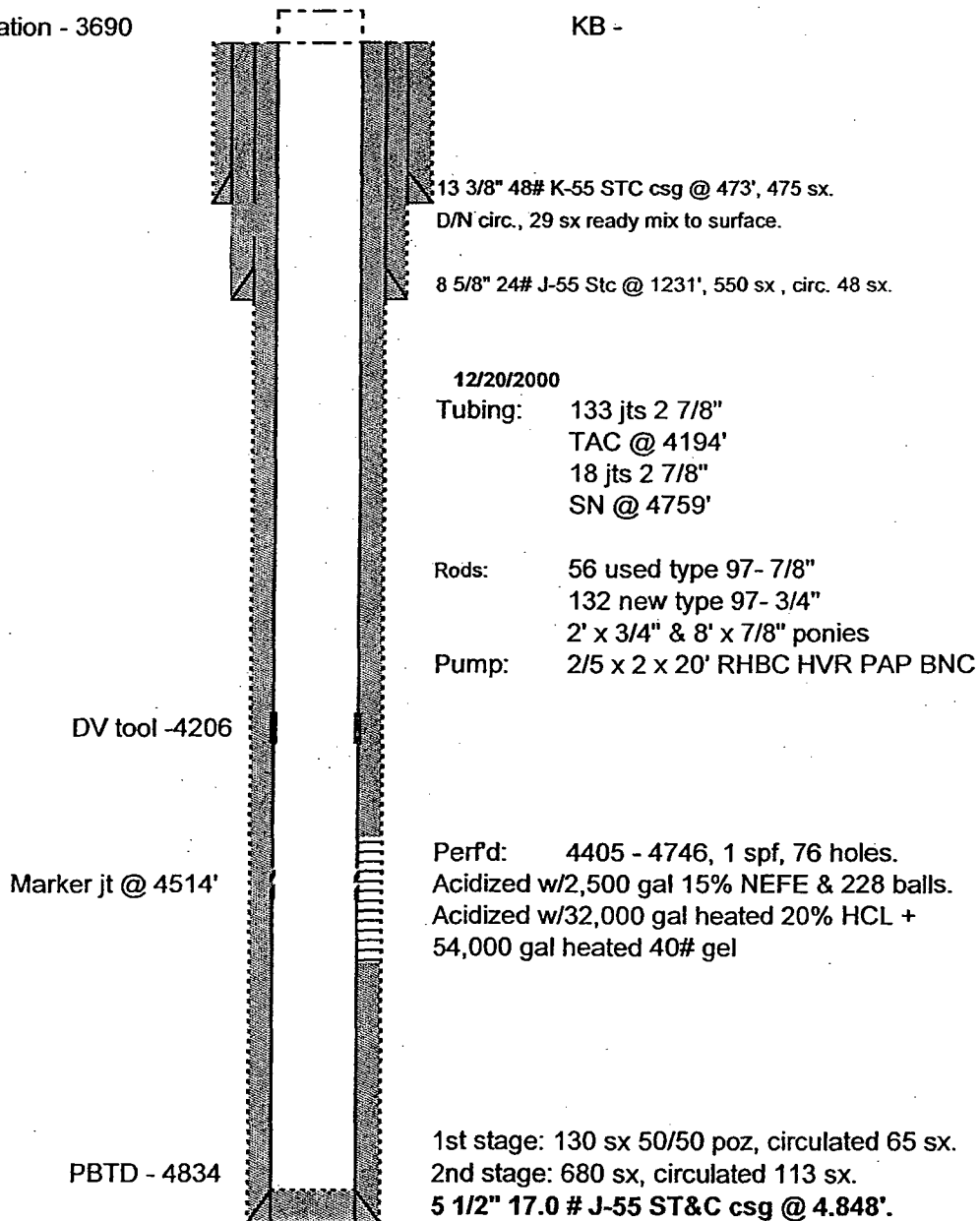
Eddy County NM

Sec 16 H T17S R30E 2310 FNL & 330 FEL

Spud - 11/11/00

Elevation - 3690

KB -



COG OPERATING LLC

ACTIVE

Lease & Well #
API # 30 015 31366

Mesilla State # 2

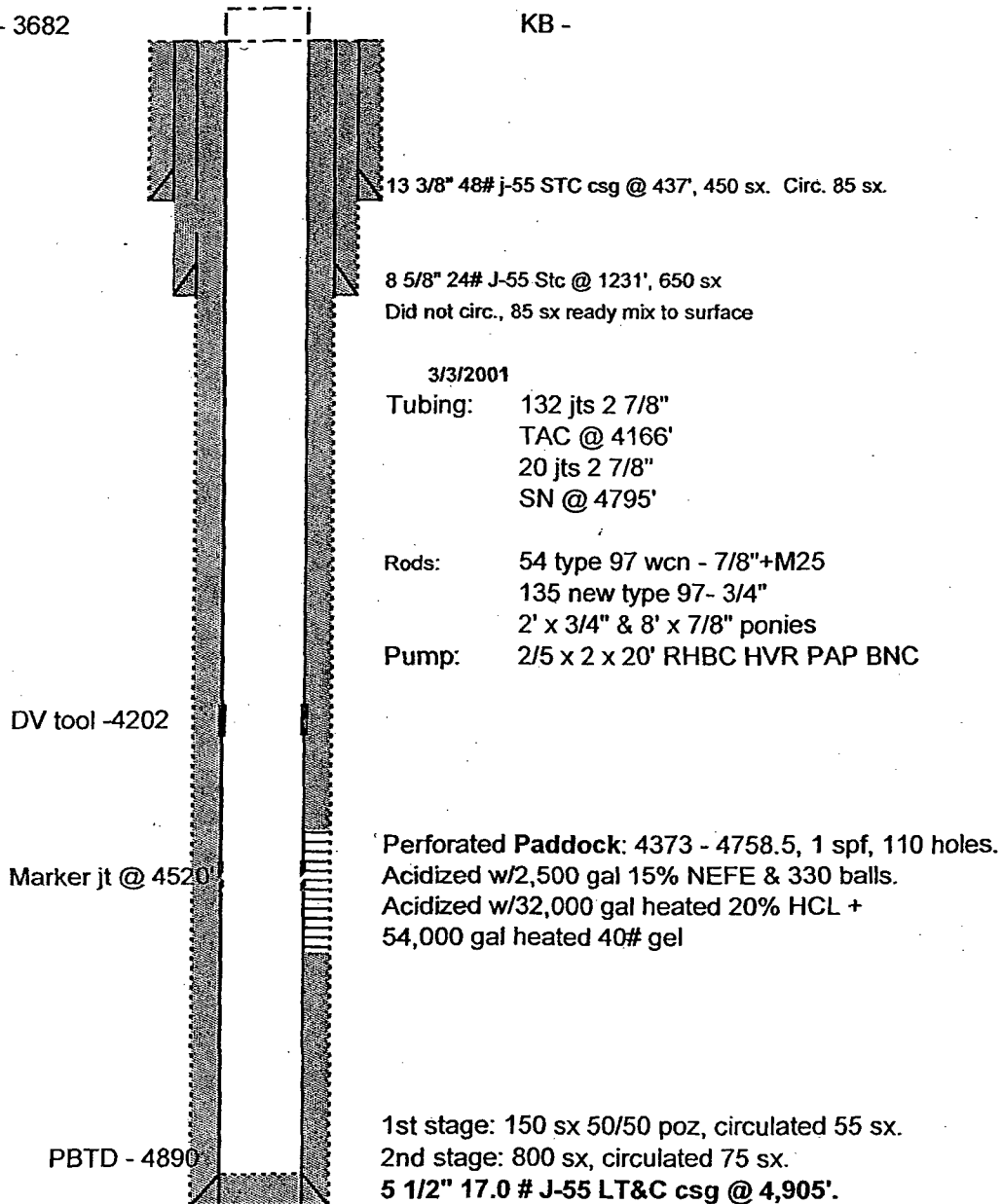
Eddy County, NM

Sec 16 H T 17S R30E 1650 FNL & 990 FEL

Spud - 1/23/01

Elevation - 3682

KB -



COG OPERATING LLC

ACTIVE

Lease & Well #
API # 30 015 34538

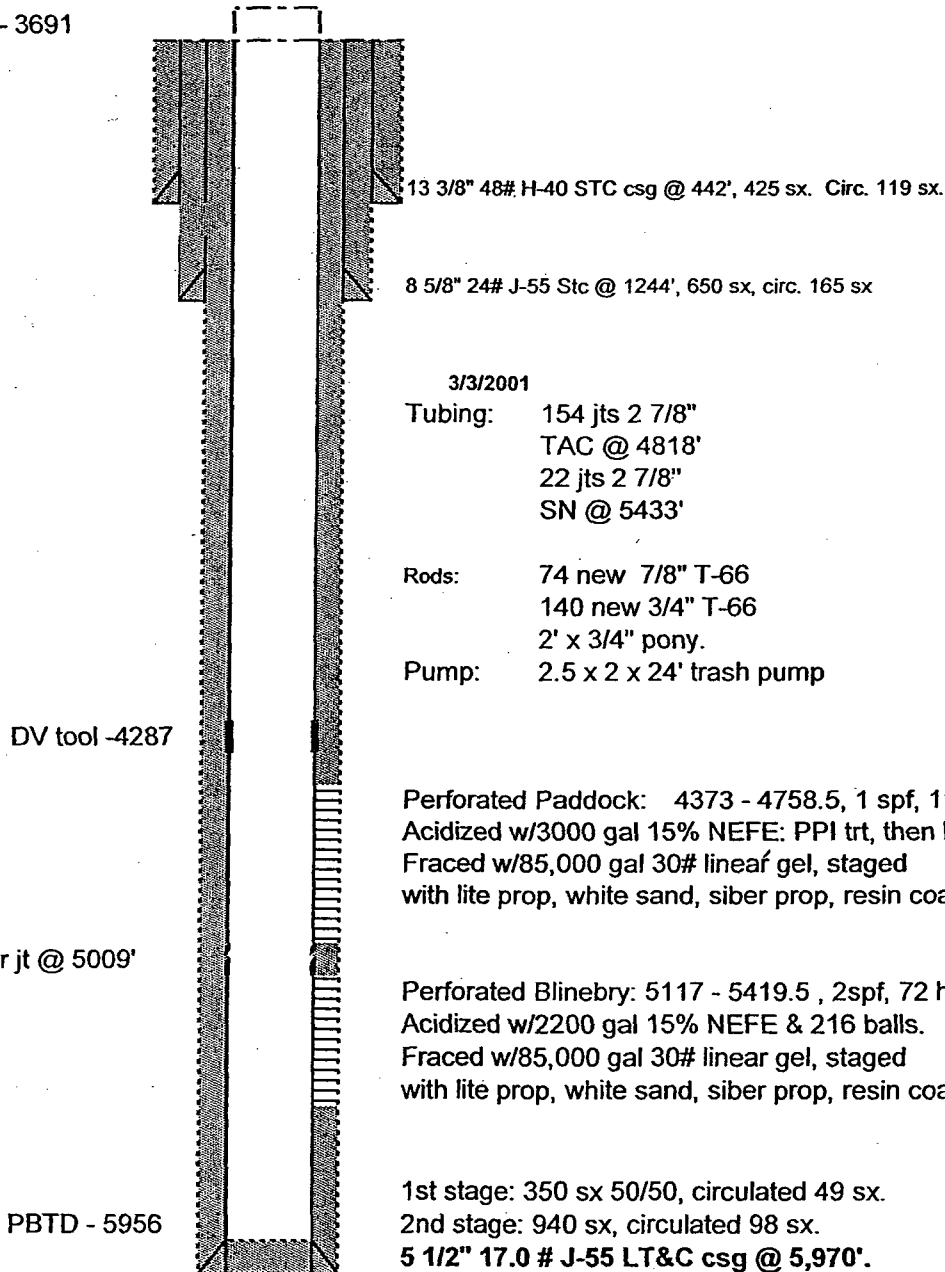
Mesilla State # 3

Spud - 4/1/06

Eddy County, NM

Sec 16 H T 17S R 30E 1650 FNL & 330 FEL

Elevation - 3691



COG OPERATING LLC

Lease & Well #
API# 30-015-35255

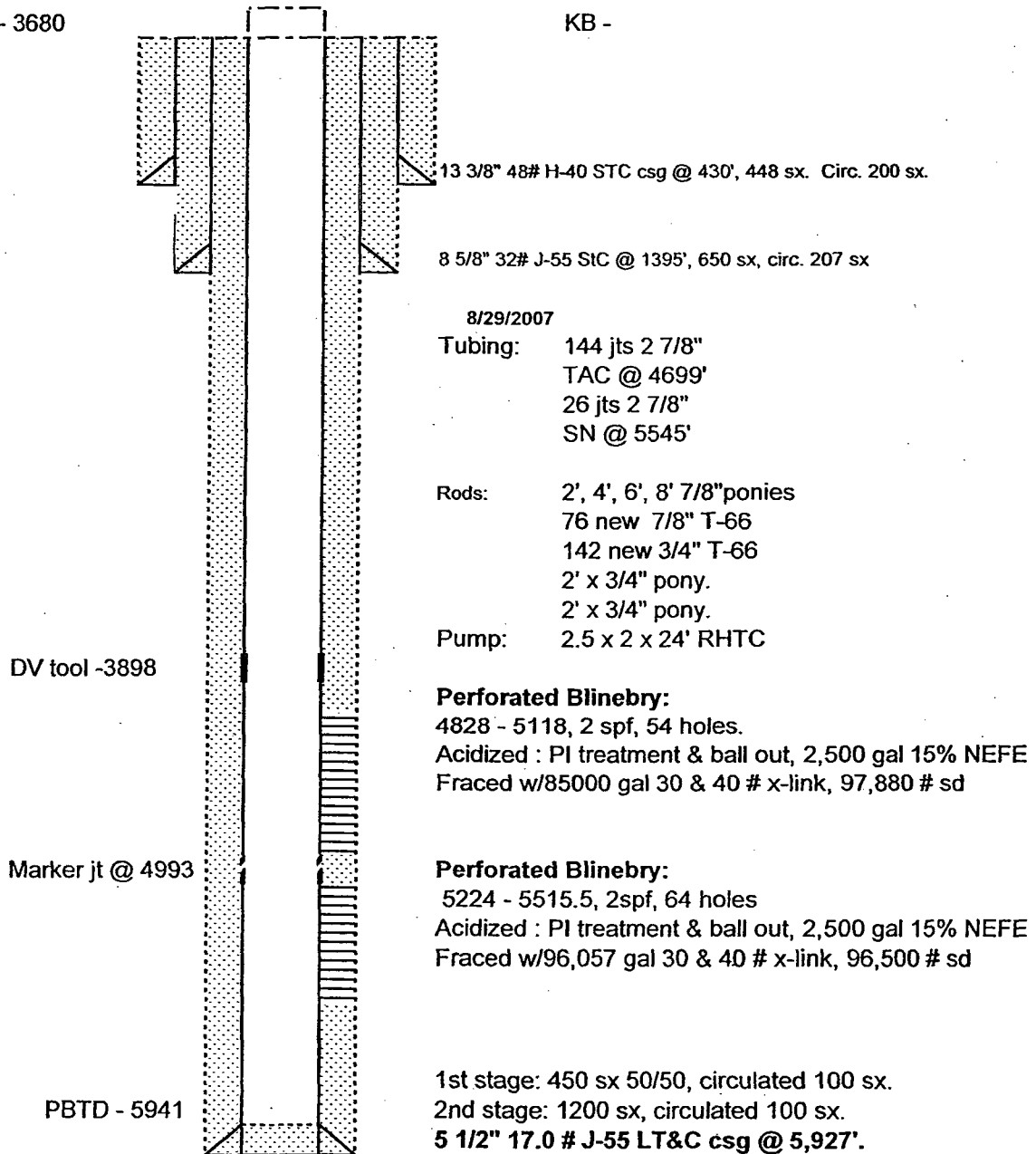
Mesilla State # 4

ACTIVE

Eddy County, NM
Sec 16 D T17S R30E 330 FNL & 330 FWL

Elevation - 3680

KB -



COG OPERATING LLC

Lease & Well #
API# 30-015-35254

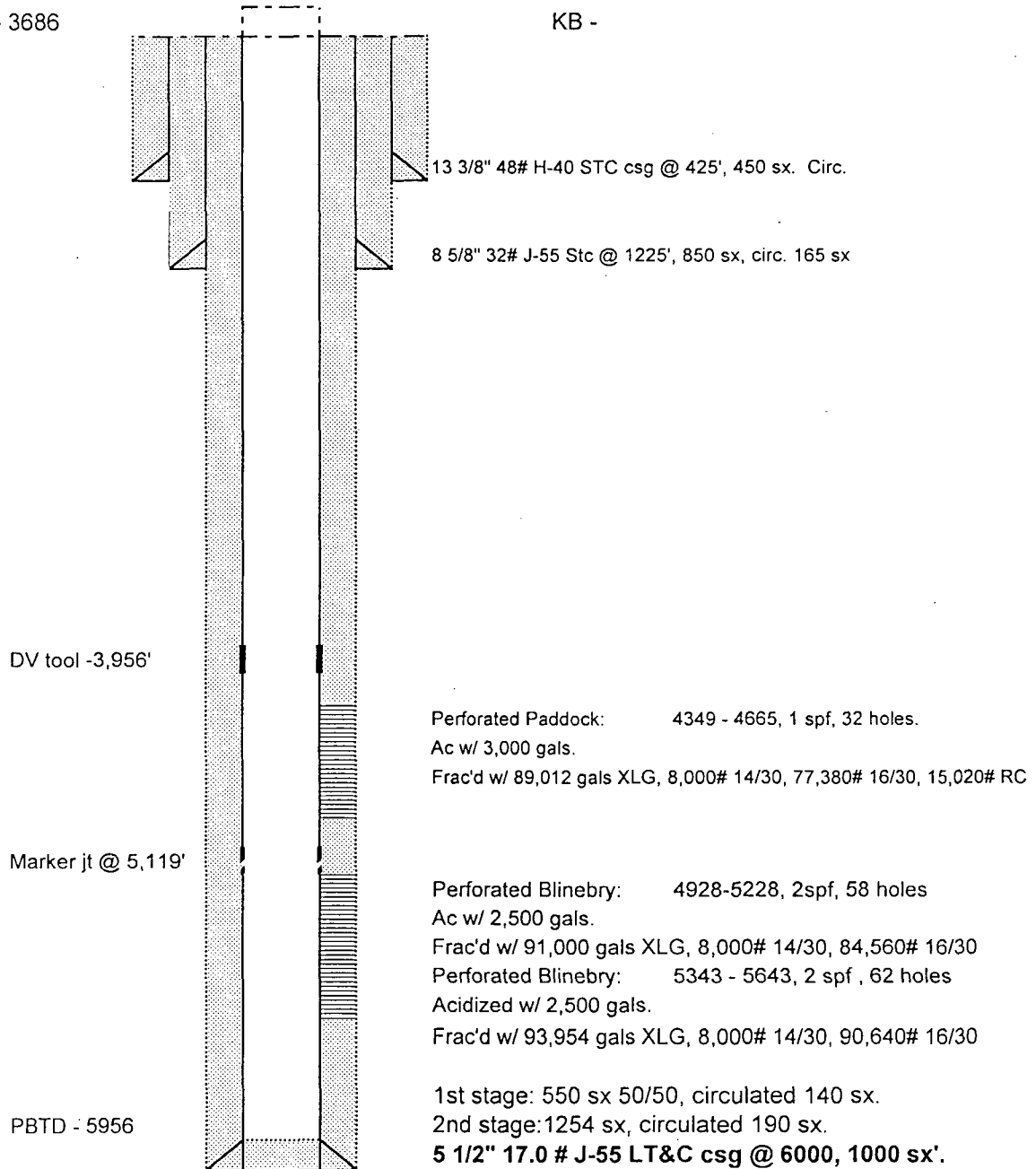
Mesilla State # 5

ACTIVE

Eddy County, NM
Sec 16 C T17S R30E 330 FNL & 1650 FWL

Elevation - 3686

KB -



COG OPERATING LLC

ACTIVE

Lease & Well #
API # 30 015 35764

Mesilla State # 6

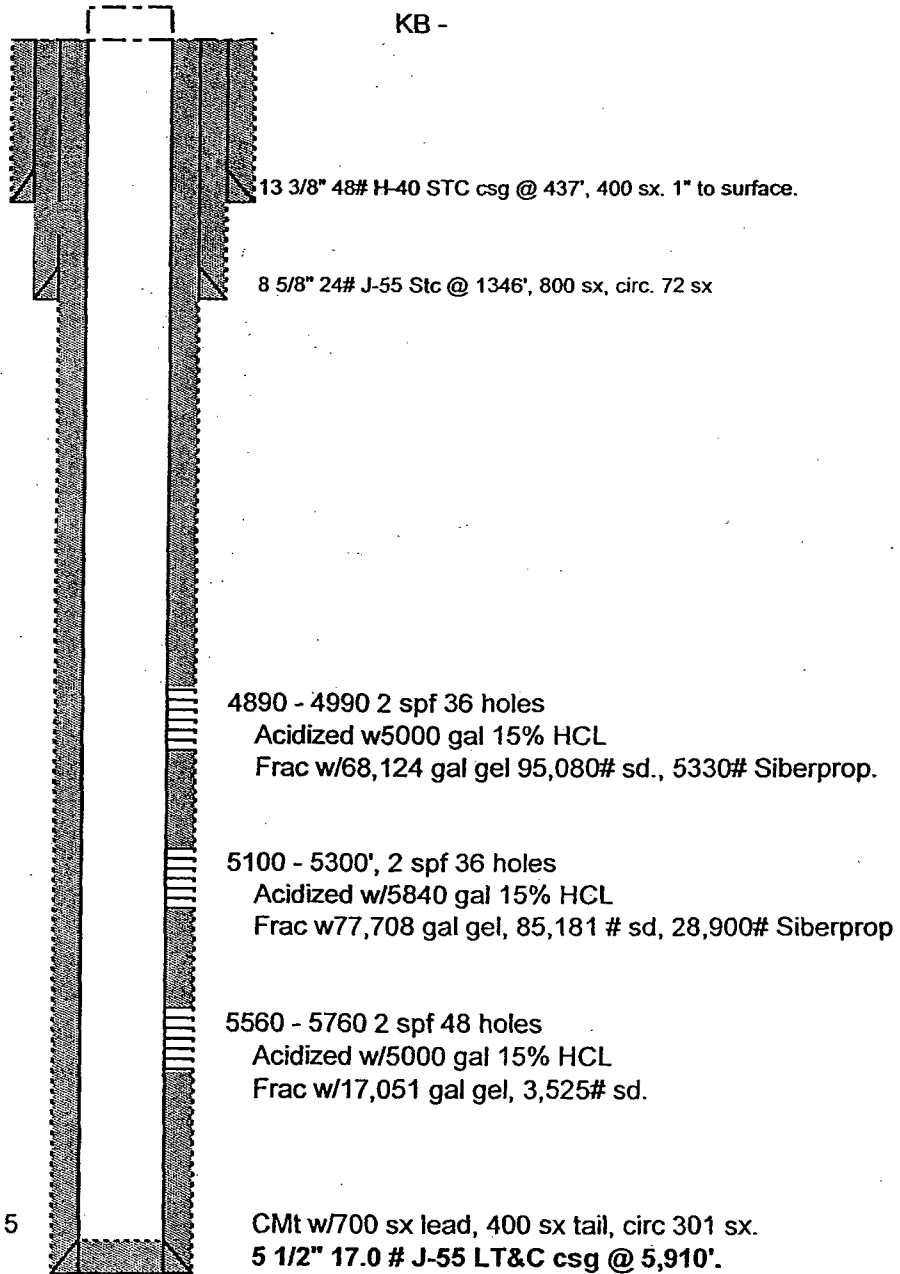
Spud - 10/3/07

Eddy County, NM

Sec 16 H T17S R30E 2270 FN& 990 FEL

Elevation - 3691

KB -



COG OPERATING LLC

Lease & Well

API # 3001535765

Mesilla State # 7

Eddy County, NM

Sec 16 D T17S R30E 990 FNL & 915 FWL

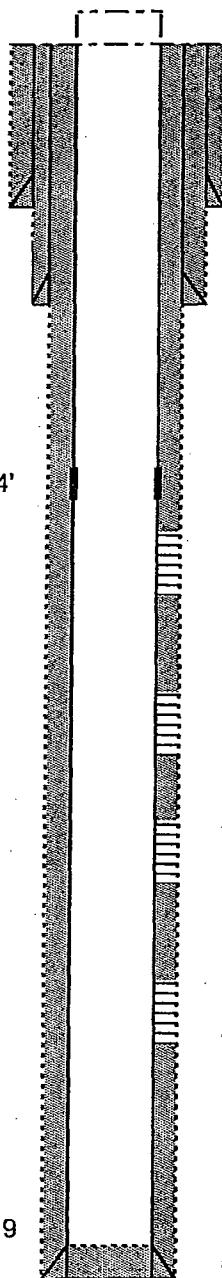
Spud - 11/7/07

Elevation - 3688

KB -

Marker jt @ 3934'

PBTD - 5819



13 3/8" 48# H-40 STC csg @ 420', 180 sx., 300 sx, 448 sx.

Cmt fell back, ready mixed to surface.

8 5/8" 24# J-55 Stc @ 1227', 600 sx lead, 200 sx tail, circ. 277 sx

4322 - 4654 1 spf 33 holes

Acidized w/3000 gal 15% NEFE, frac w/94,000 gal, 7,588# Lite, 75,413# 16/30
15,177# SiberProp

5000 - 5200

Acidized w/5000 gal HCL

Frac w/66,192 gal gel, 82,439 # sd.

5330 - 5430

Acidized w/5462 gal HCL

Grac w/28,140 gal, 24,321# 16/30 sd

5520 - 5620,

Acidized w/5000 gal 15% NEFE .

Frac w/23,645 gal gel, 16,20# 16/30 sd

Cmt w/700 sx lead, 400 sx tail, circ. 252 sx
5 1/2" 17.0 # J-55 LT&C csg @ 5,862'.

COG OPERATING LLC

Lease & Well #
3001535766

Mesilla State # 8

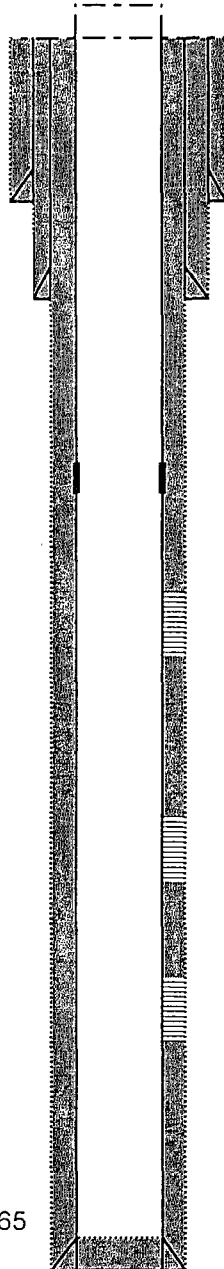
Eddy County, NM

Sec 16 C T17S R30E 915 FNL & 2310 FWL

Spud - 9/21/07

Elevation - 3683

KB -



13 3/8" 48# H-40 STC csg @ 435', 180 sx., 300 sx, 400 sx.
1" to surface w/340 sx.

8 5/8" 32# J-55 STC @ 1225', 600 sx lead, 200 sx tail, circ. 200 sx

Paddock

4342 - 4699 1 spf 33 holes

Acidized w/3000 gal 15% NEFE

Frac w/89,154 gal, 8,069# 14/30, 74,343# 16/30, 16,392 RC

Blinbry

5050 - 5250, 2 spf 36 holes

Acidized w/2500 gal HCL

Frac w/1,974 gal gel, 48,396# sd

Blinbry

5320 - 5520, 2 spf 48 holes

Acidized w/2500 gal 15% NEFE .

Fraced w/11,5000# sd

PBTD - 5865

Cmt w/700 sx lead, 400 sx tail, circ. 50 sx
5 1/2" 17.0 # J-55 LT&C csg @ 5,929'.

COG OPERATING LLC

Lease & Well

3001536487

Mesilla State # 9

Eddy County, NM

Sec 16 C T17S R30E 455 FNL & 2180 FWL

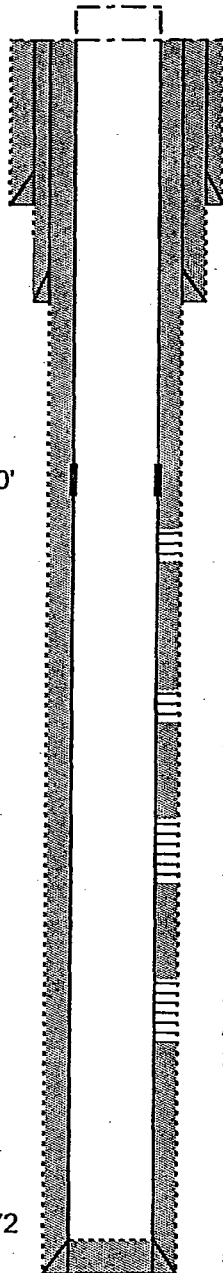
Spud - 9/21/07

Elevation - 3682

KB -

Marker jt @ 4010'

PBTD - 5872



13 3/8" 48# H-40 STC csg @ 448', 250 sx, 200 sx.
Circ 125 sx.

8 5/8" 24# J-55 STC @ 1350', 300 sx lead, 200 sx tail, circ. 29 sx

Paddock

4360-4659', 1 spf 29 holes

Acidized w/3000 gal 15% NEFE

Frac 104,671 gal Silverstem, 111,700# 1630, 24,400# crc

Blinbry

4930 - 5130' 2 spf 36 holes

Acidized w/2500 gal 15% NEFE

Frac 118,856 gal Silverstem, 145,900# 1630, 32,800# crc

5200 - 54000, 2 spf 36 holes

Acidized w/2500 gal HCL

Frac w/115,933 gal Skilverstem, 147,400# 16/30, 34,200# crc sd

5500 - 5700, 2 spf 48 holes

Acidized w/2500 gal 15% NEFE

Frac w/115,267 gal Silverstem, 141,200# 1630, 36,700# crc# sd

Cmt w/630 sx lead, 400 sx tail, circ. 123 sx
5 1/2" 17.0 # J-55 LT&C csg @ 5,950'.

COG OPERATING LLC

Lease & Well #

3001536491

Mesilla State # 10

Eddy County, NM

Sec 16 F T17S R30E 1290 FNL & 1440 FWL

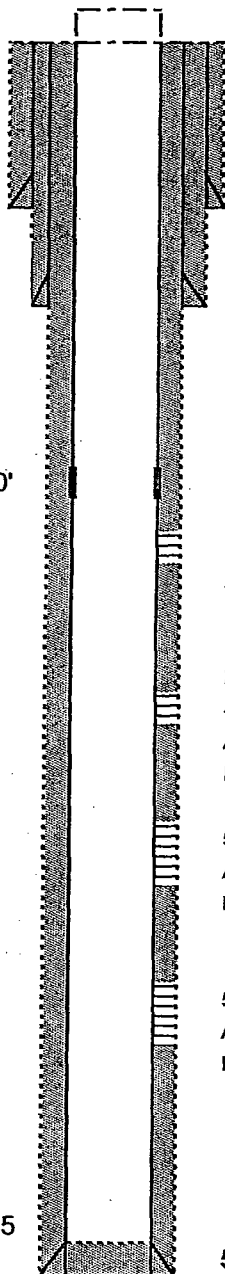
Spud - 12/27/2009

Elevation -

KB -

Marker jt @ 4010'

PBTD - 5965



13 3/8" 48# H-40 STC csg @ 461', 450 sx,
Circ 108 sx.

8 5/8" 24# J-55 STC @ 1307', 300 sx lead, 200 sx tail, circ. 103 sx

Paddock

4320-4630', 1 spf 29 holes

Acidized w/3000 gal 15% NEFE

Frac 106,848 gal Silverstem, 143,148# 1630

Blinbry

4940 - 5140' 1 spf 36 holes

Acidized w/2500 gal 15% NEFE

Frac 128,562 gal Silverstem, 175,083# 1630

5210 - 5410, 2 spf 36 holes

Acidized w/2500 gal HCL

Frac w/128,016 gal Silverstem, 176,901# 16/30

5480 - 5680, 2 spf 48 holes

Acidized w/2500 gal 15% NEFE .

Frac w/129,444 gal Silverstem, 176,984# 1630, 36,700# circ# sd

Cmt w/550 sx lead, 400 sx tail, circ. 225 sx

5 1/2" 17.0 # J-55 LT&C csg @ 6,010'.

COG OPERATING LLC

Lease & Well

3001536492

Mesilla State # 11

Eddy County, NM

Sec 16 D T17S R30E 330 FNL & 990 FWL

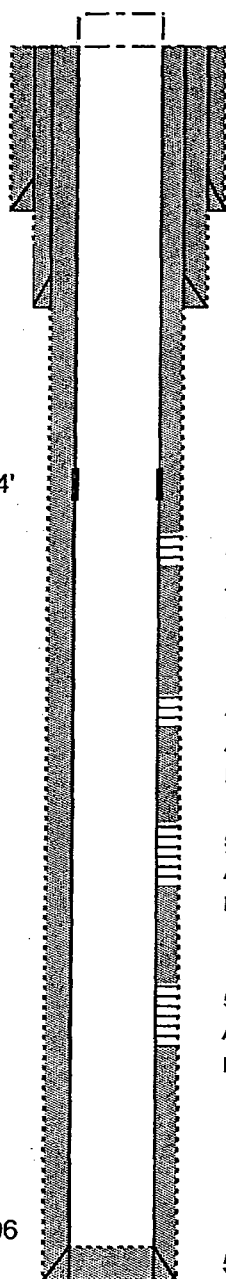
Spud - 5/24/2009

Elevation - 3683

KB -

Marker jt @ 3964'

PBTD - 5896



13 3/8" 48# H-40 STC csg @ 420', 448 sx,
1" to surface w/73 sx

8 5/8" 24# J-55 STC @ 1305', 300 sx lead, 200 sx tail, circ. 110 sx

Paddock

4342-4646', 1 spf 29 holes

Acidized w/3000 gal 15% NEFE

Frac 106,869 gal Silverstem, 10536768# 16/30, 30,472# crc

Blinbry

4910 - 5110' 1 spf 36 holes

Acidized w/2500 gal 15% NEFE

Frac 112,650 gal Silverstem, 148,892# 16/30, 21,890# crc

5180 - 5380, 2 spf 36 holes

Acidized w/2500 gal HCL

Frac w/115,202 gal Silverstem, 144,250# 16/30, 33,127# crc

5450 - 5650, 2 spf 48 holes

Acidized w/2500 gal 15% NEFE .

Frac w/116,967 gal Silverstem, 144,101# 16/30, 31,819# crc

Cmt w/600 sx lead, 400 sx tail, circ. 145 sx
5 1/2" 17.0 # J-55 LT&C csg @ 5,960'.

COG OPERATING LLC

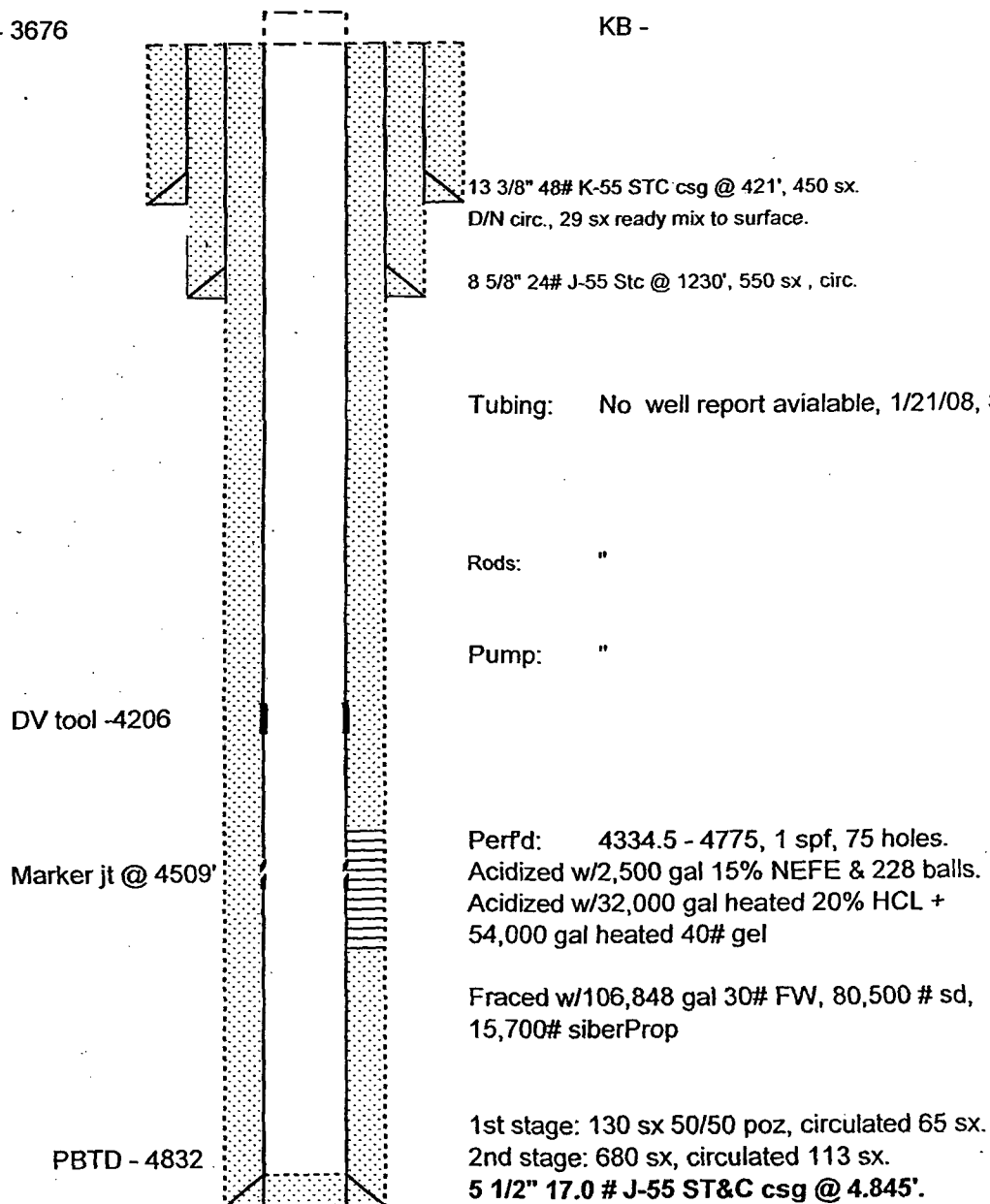
Lease & Well #
API# 30-015-30591

Pawnee State #1

Eddy County, NM
Sec 16 G T17S R30E 2185 FNL & 1600 FEL

Elevation - 3676

KB -



COG OPERATING LLC

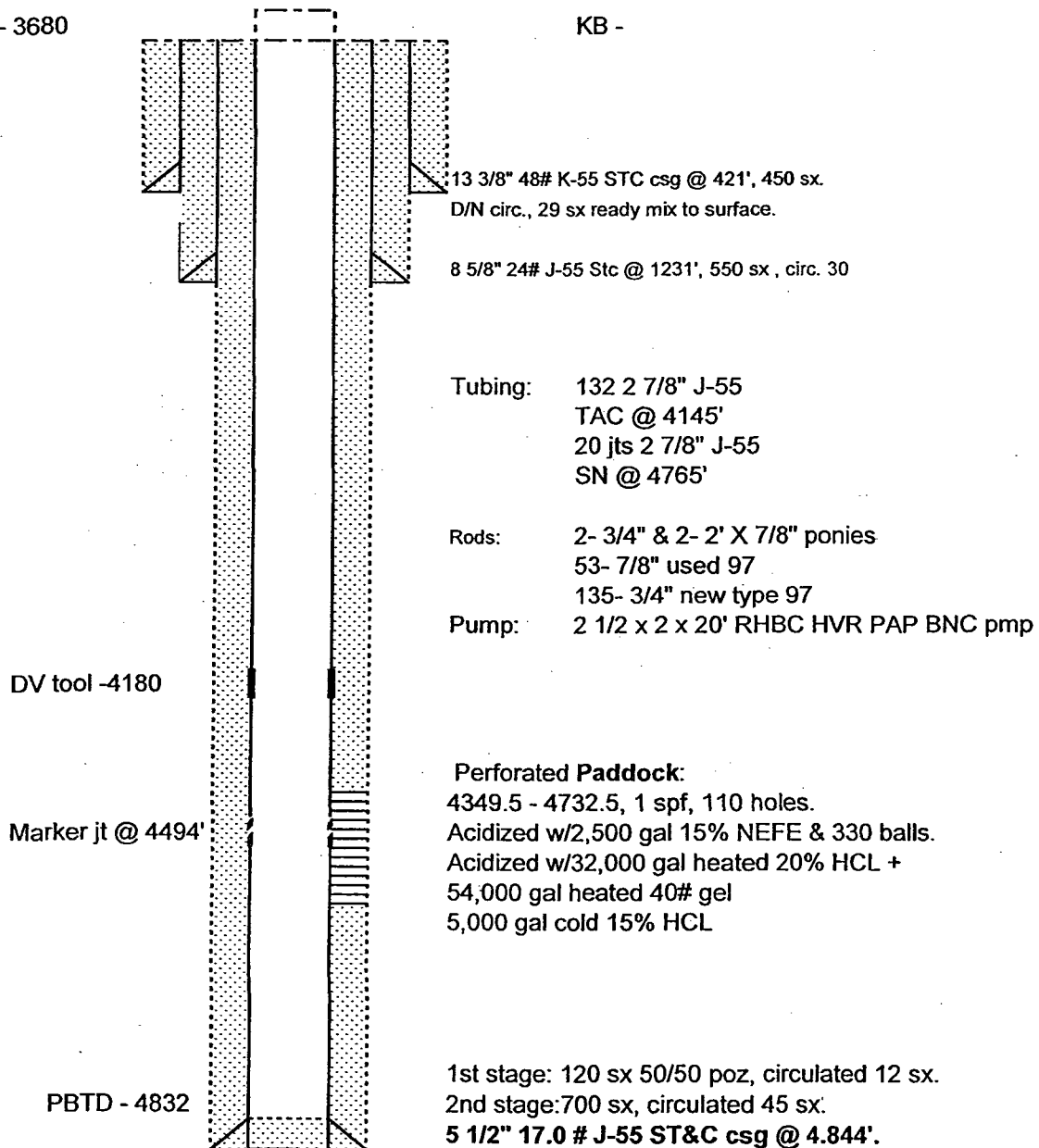
Lease & Well #
API# 30-015-31368

Pawnee State #2

Eddy County, NM
Sec 16 G T17S R30E 1650 FNL & 2290 FEL

Elevation - 3680

KB -



COG OPERATING LLC

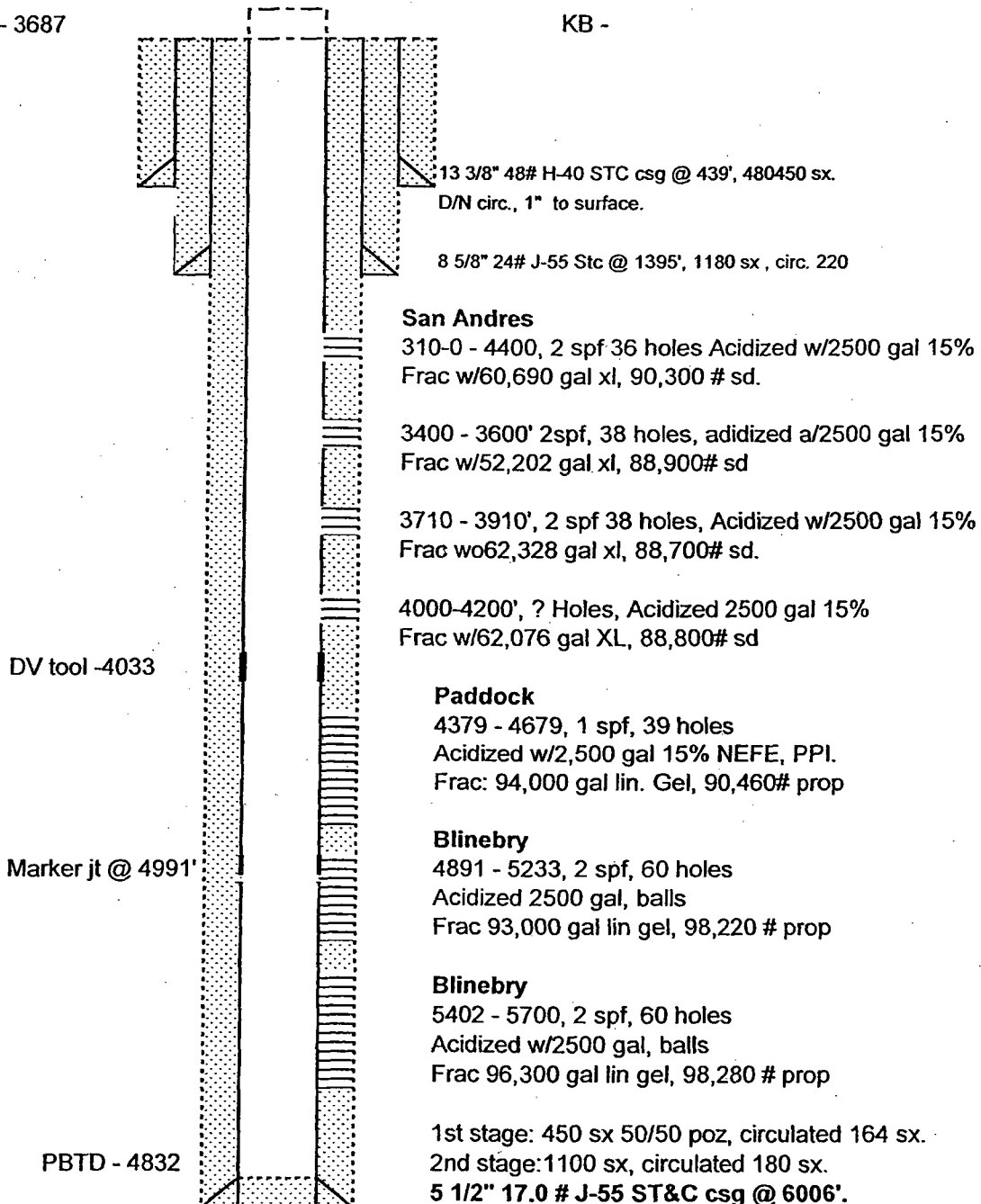
Lease & Well #
API# 30-015-34883

Pawnee State #3

Eddy Co, NM
Sec 16 G T17S R30E 1650 FNL & 1650 FEL

Elevation - 3687

KB -



COG OPERATING LLC

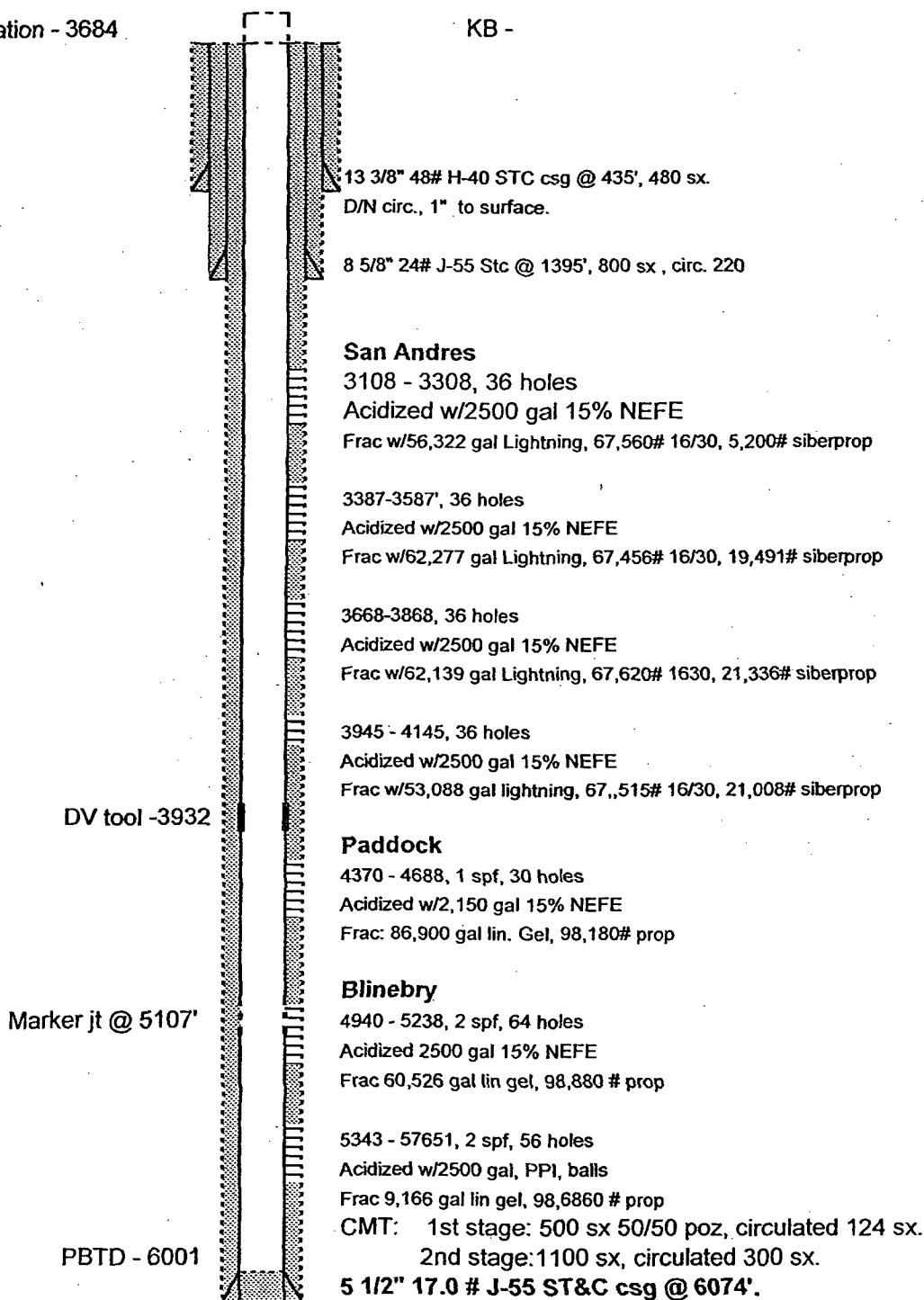
Lease & Well #
API # 30-015-34884

Pawnee State #4

2115' FNL & 1970' FEL
Sec 16G T 17S R 30E
Eddy Co., NM

Elevation - 3684

KB -



COG Operating LLC

Lease & Well # Texaco BE #3

30 015 26110

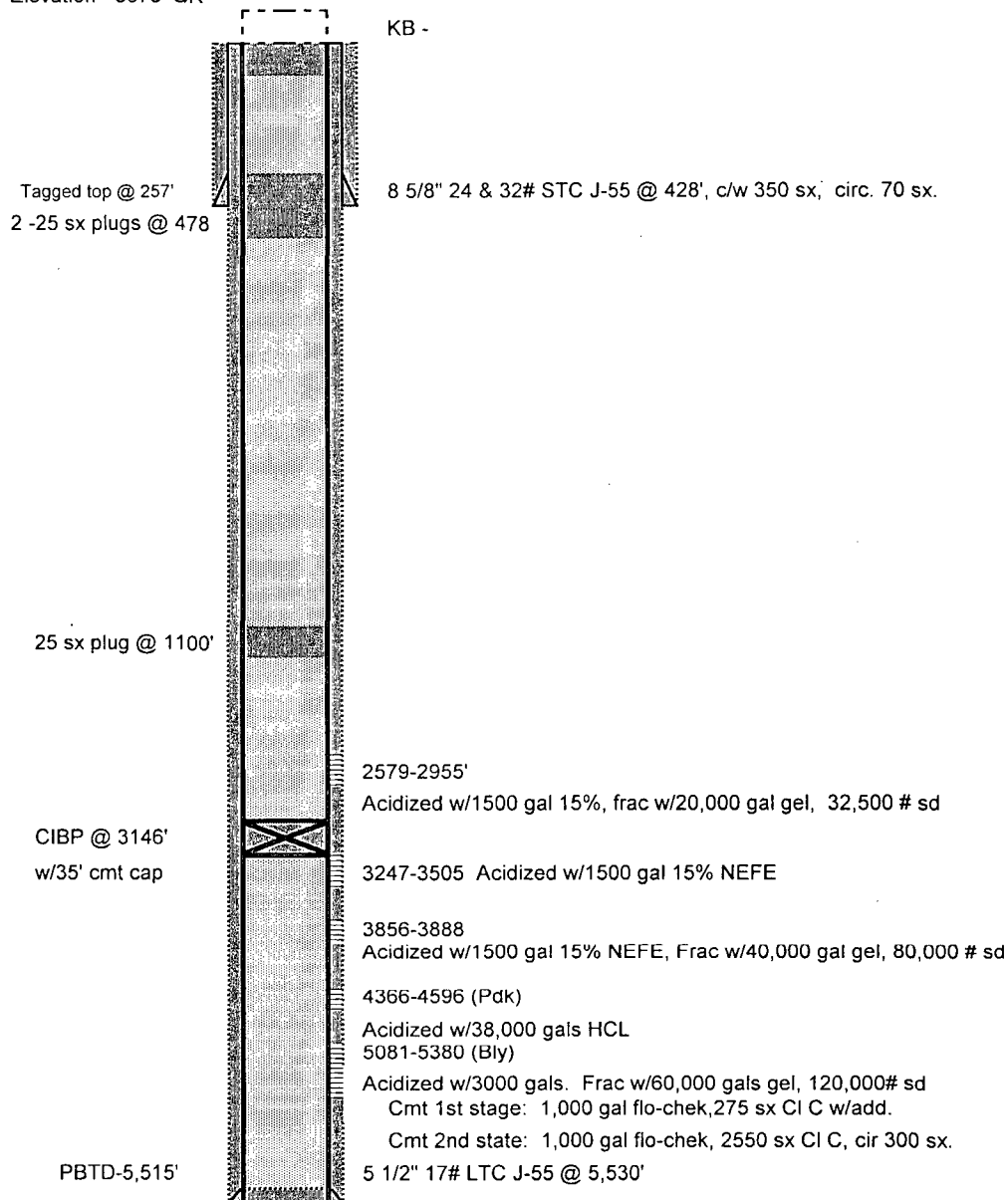
Spud - 6/3/1989

Elevation - 3678' GR

P&A

Eddy Co., NM

Sec 16 G, T17S, R30E, 330 FNL & 1650 FEL



COG OPERATING LLC

ACTIVE

Lease & Well #

Texaco BE #4

Eddy Co, NM

APE # 3001526233

Sec. 16 A T17S, R30E, 330 FNL, 330 FEL

Elevation - 3,682' GL

KB = 9'

Csg leak in 5 1/2", 198' - 264', C/w 500 sx (11/13/08)

8 5/8" 25.4# csg @ 437', 150 sx cmt

Sqzd w/125 sx w/ retainer @ 2021' (11/12/08)

5-8-06: Perf'd Queen 2,114 - 21', 15 holes; 2,124 - 31', 15 holes

Acidized, Fraced w/85,000gal 30/40# linear gel, 99,000 # sand.

2-21-90: Perf'd GB 2,616 - 2,622', 2,672 - 2,676', 2,744 - 2,746',

Acidized w/ 1,500 gal 15% NE HCL, Frac w/60,000 gal 40# gel,

2-1-90: Perf'd GB/SA 2,715 - 3,008' 23 holes

Acidize w/1500 gal 15% NE HCL, Frac w/40,000 gal, 370 sx sd

Sqzd w/210 sx w/retainer @ 2809' (11/11/08)

Perf'd GB/SA 3,179 - 3,291', 7 holes

Acid 1000 gal 15% NE, Frac 40,000 gal, 450 sx

Perf'd GB/SA 3,452 - 71, 7 holes Acidized w/500 gal.

Sqzd both sets w/210 sx, (11/11/08)

Perf'd GB/SA 3,870 - 3,888' 17 holes

Acidize w/500 gal 15% NE HCL, Frac w/20,000 gal, 450 sx sd

Perf'd Paddock 4,398 - 4,676' 29 holes. Sqzd off w/200 sx (11/10/08)

4" DV tool @ 4712'

5 1/2" 17.0 # csg @ 4,912'.

1st stage cmt: 2' Not on file if circulated 1st stage.

2nd stage cmt: 2200 sx CI C, circ. 185 sx.

Blinbry

5000 - 5200

No stimulation info on reports (3/11/09)

5280 - 5480

5760 - 5760

PBTD - 5,824'

Cmt w/125 sx CI c. w/additives. TOC 4712', CBL

4" 11/6# P110 3.862 ID UTFJ @ 5,870'.

COG OPERATING LLC

Lease & Well #
API# 30 015 31583

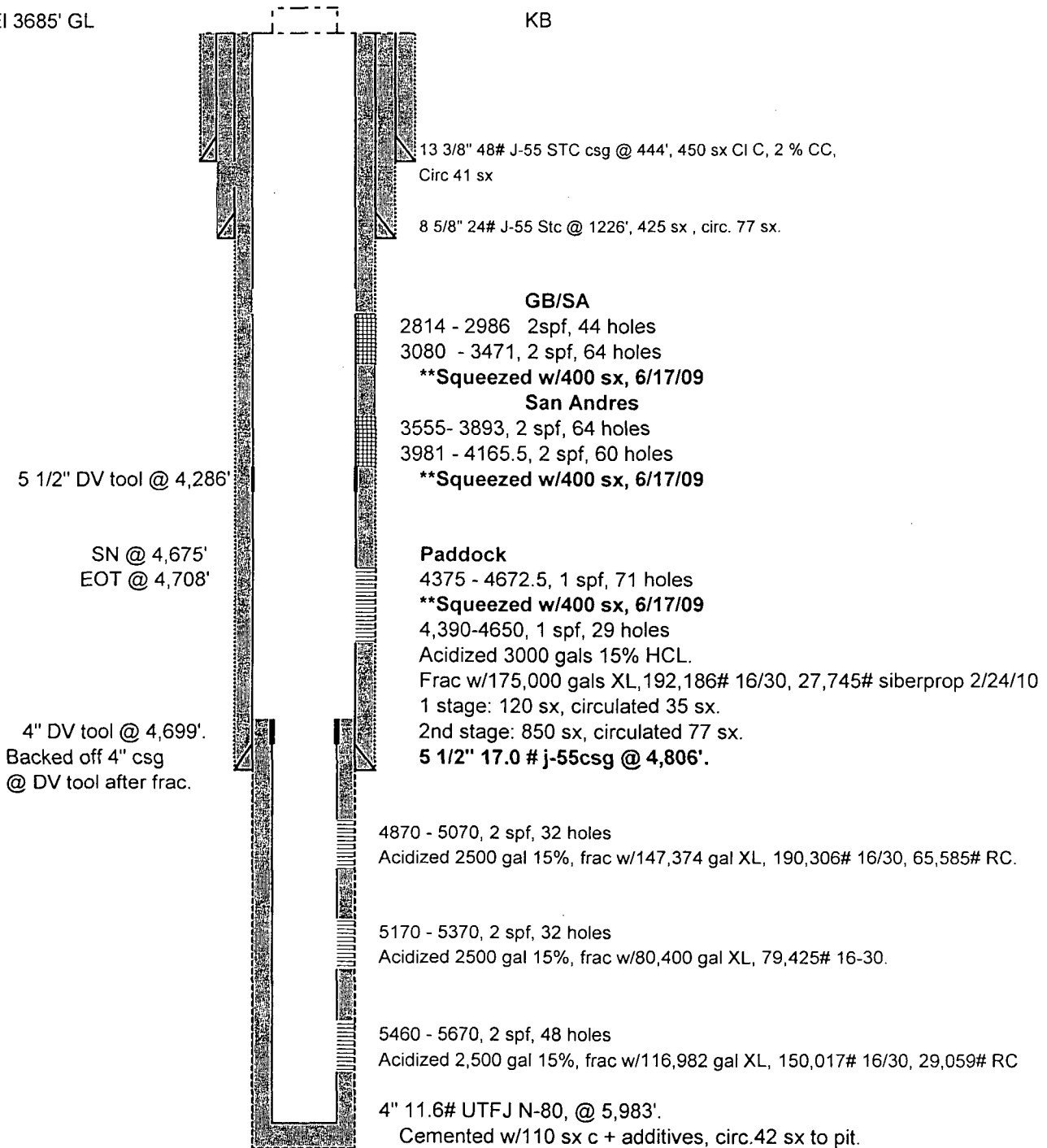
Texaco BE #5

Eddy Co., NM
Sec 16 B T17S R30E 990 FNL & 1650 FEL

Spud 4/6/01

EI 3685' GL

KB



COG OPERATING LLC

ACTIVE

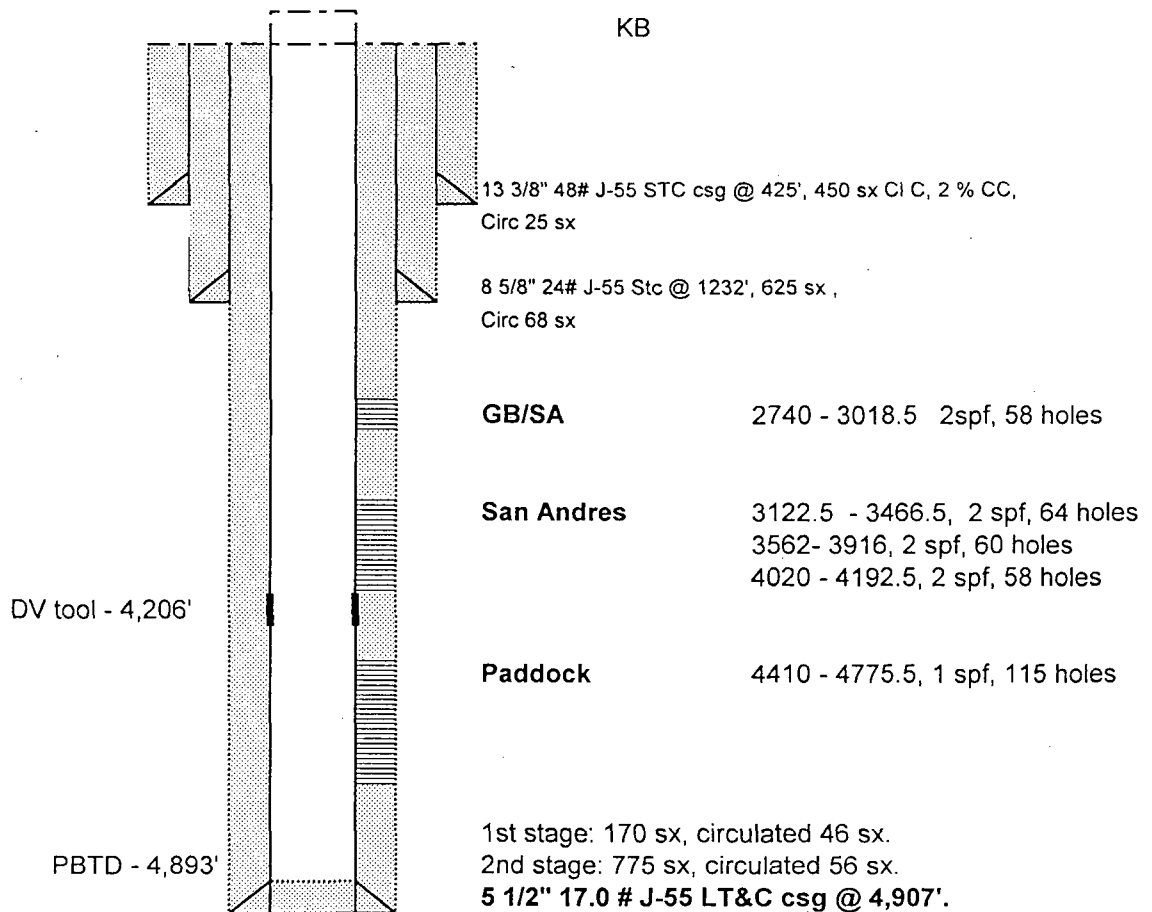
Lease & Well #
API # 30-015-31585

Texaco BE #6

Sec 16 A T 17S R 30E, 990 FNL 330 FEL
Eddy Co., NM

ALT.

KB



COG OPERATING LLC

ACTIVE

Lease & Well #
API # 30-015-34539
Spud - 2/4/06

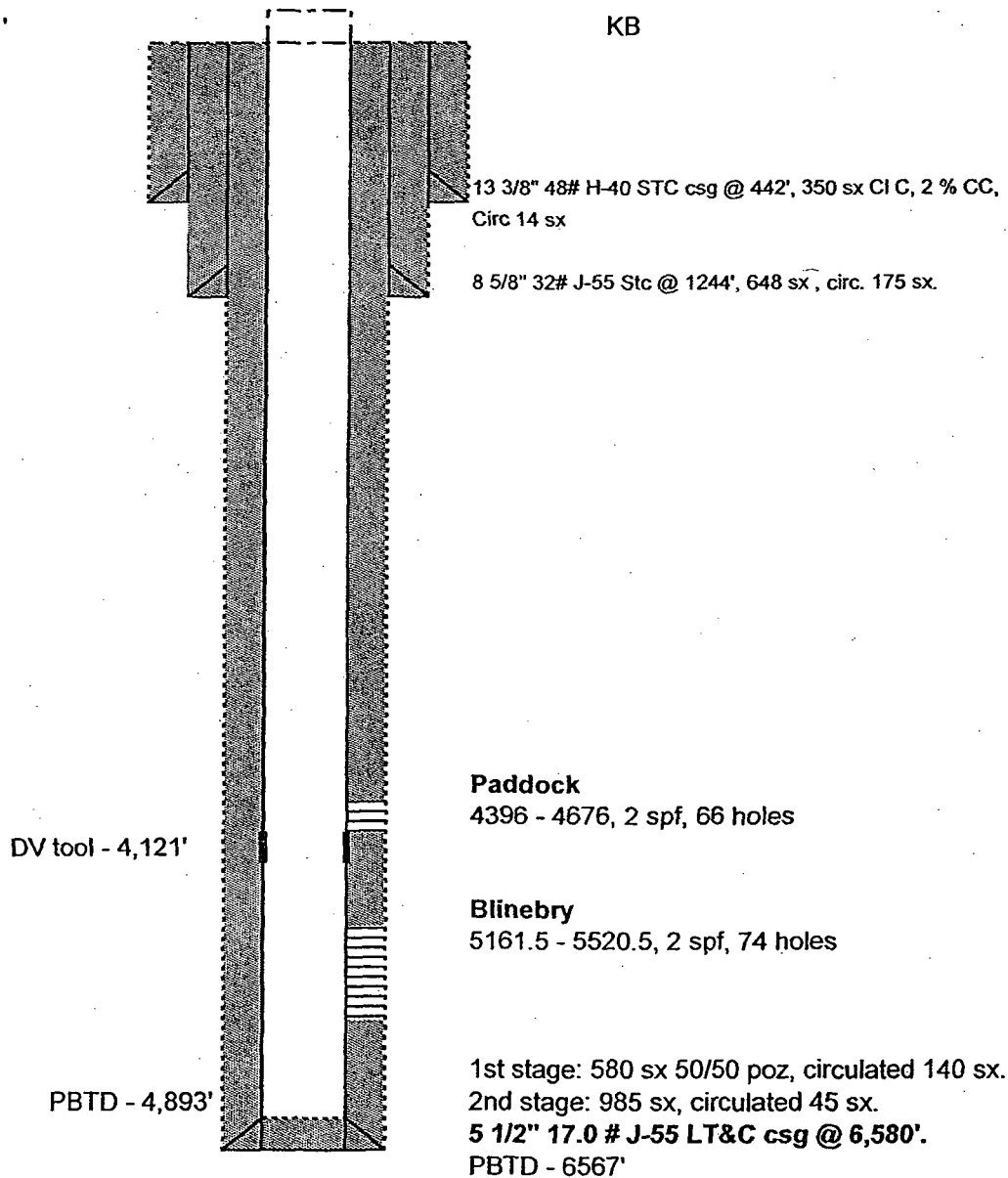
Texaco BE #7

Eddy Co., NM

Sec 16 A T17S R30E 330 FNL & 990 FEL

EL. 3,681'

KB



COG OPERATING LLC

Lease & Well #

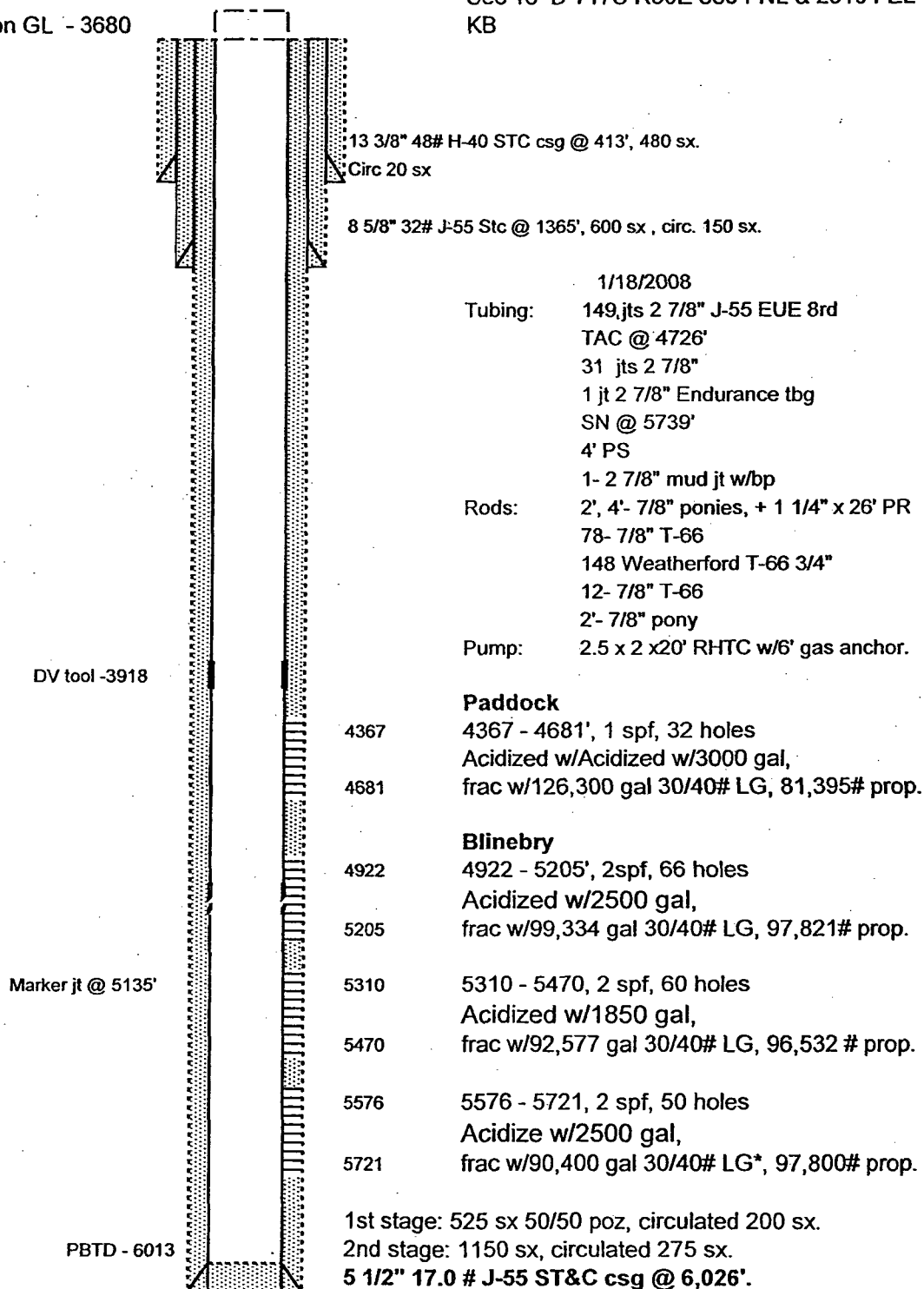
API# 30-015-35253

Texaco BE #8

Elevation GL - 3680

Eddy Co., NM

Sec 16 B T17S R30E 330 FNL & 2310 FEL
KB



Dwights PLUS on CD Well Summary Report

General Information

State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	6030
Field	:	LOCO HILLS	Log Total Depth	:	
Operator Name	:	COG OPERATING LLC	True Vertical Depth	:	
Lease Name	:	TEXACO BE			
Well Number	:	8	Spud Date	:	MAY 02, 2007
API Number	:	30015352530000	Comp Date	:	JUN 18, 2007
Regulatory API	:	3001535253			
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	
Permit Number	:		Ground Elevation	:	3680
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	452YESO			
Oldest Age Pen	:	452			
Producing Formation	:	452YESO			
Township	:	17 S	Section	:	16 SEC
Range	:	30 E	Spot	:	NW NW NE
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	330 FNL 2310 FEL CONGRESS SECTION		
Latitude	:	32.8407900	Latitude (Bot)	:
Longitude	:	-103.9754500	Longitude (Bot)	:
Long. Source	:	TS		
Location Narrative	:	Type	Remark	
		SCALED FOOT	REGULATORY	
		IRREG_SECT	N	

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	452YESO	452YESO	4922	5721		1600	37.3	PERF	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc
001	125	BPD					200	MCFD		340	BBL	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	4922	5204	2500	GAL					ACID			
001	4922	5204	99334	GAL	97821	LB			FRAC		SAND	
001	5310	5470	2500	GAL					ACID			
001	5310	5470	92577	GAL	96532	LB			FRAC		SAND	
001	5576	5721	2500	GAL					ACID			
001	5576	5721	90401	GAL	97820	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	4922	5204		PERF	452YESO	452YESO				
001	5310	5470		PERF	452YESO	452YESO				
001	5576	5721		PERF	452YESO	452YESO				

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454RSLR	RUSTLER	310				LOG	

Dwights PLUS on CD Well Summary Report

454SLDO	SALADO	566	LOG
453YTES	YATES	1207	LOG
453SVRV	SEVEN RIVERS	1614	LOG
453BWRS	BOWERS SD	1878	LOG
453QUEN	QUEEN	2097	LOG
453GRBG	GRAYBURG	2497	LOG
453SADR	SAN ANDRES	2828	LOG
453LVNG	LOVINGTON	2890	LOG
453GLRT	GLORIETA	4237	LOG
452YESO	YESO	4347	LOG

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
1	CNL				
1	MSFL				

Casing Data

Size	Base Depth	Cement	Unit
13 3/8 IN	413	928	SACK
8 5/8 IN	1365	600	SACK
5 1/2 IN	6026	1675	SACK

Tubing Data

Size	Base Depth	Mixed String
2 7/8 IN	5739	

COG OPERATING LLC

ACTIVE

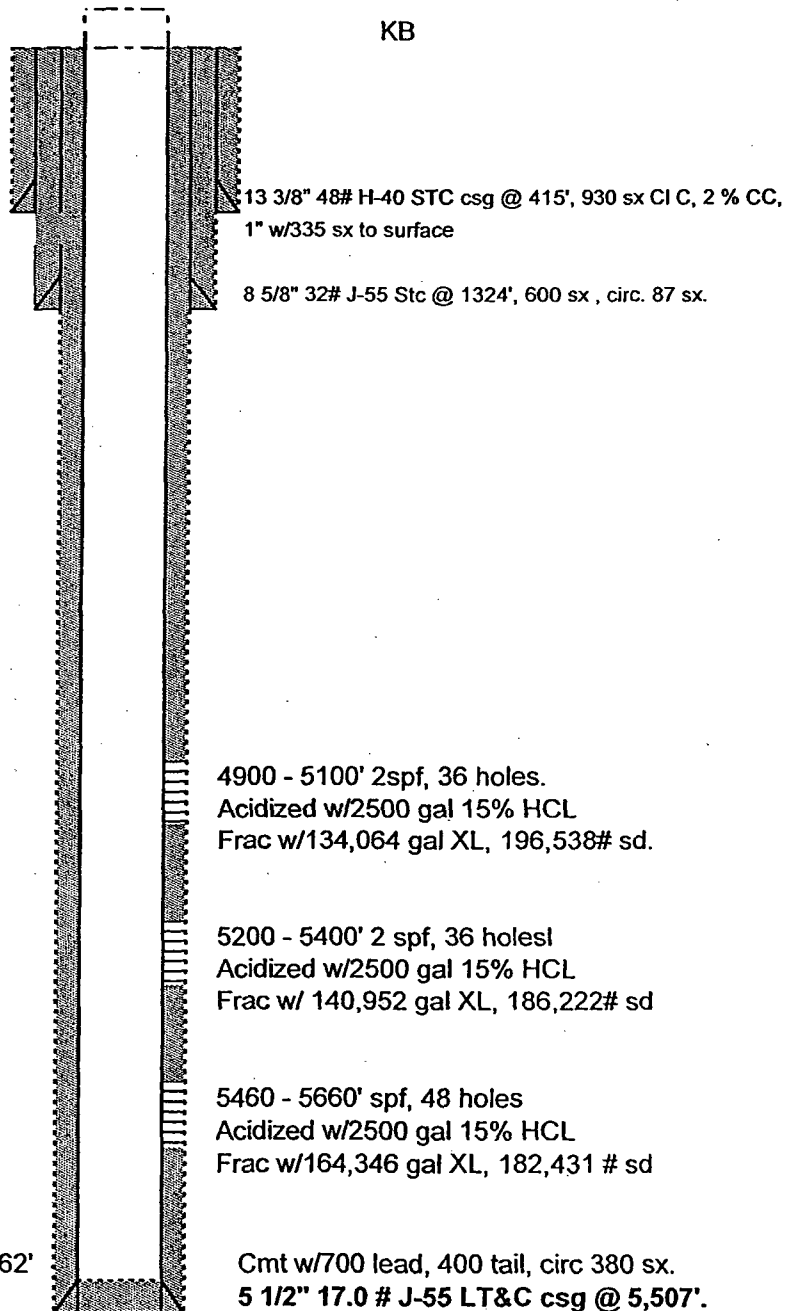
Lease & Well #
API# 30 015 36352
Spud - 2/4/06

Texaco BE #9

Eddy Co., NM
Sec 16 B T17S R30E 890 FNL & 2510 FEL

EL. 3,681'

KB



COG OPERATING LLC

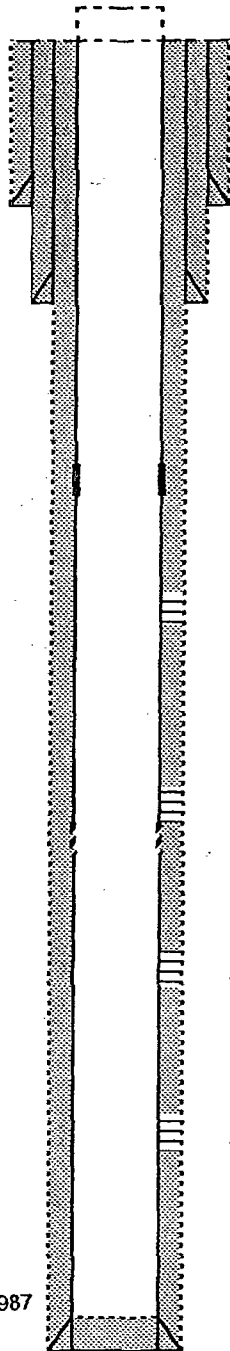
Lease & Well #
30 015 36353

Texaco BE #10

Eddy Co, NM

Sec 16 A T17S R30E 990 FNL & 990 FEL
KB

Elevation GL - 3692



13 3/8" 48# H-40 STC csg @ 475', 480 sx.
Circ 251 sx

8 5/8" 32# J-55 Stc @ 1262', 700 sx, circ. 169 sx.

Paddock

4410 - 4687', 1 spf 33 holes
Acidized w/2500 gal 15% NEFE
Frac w/113,011 gal lightning, 125,250# 16/30, 18,635# siberprop

Blinbry

4900 - 5100', SF 36 holes
Acidized w/2500 gal,
Frac w/117,432 gal Silverstem, 164,127# 16/30, 28,546# crc

5190 - 5390, SF 36 holes
Acidized w/2500 gal,
Frac w/117,279 gal Silverstem, 155,784# 16/30, 30,871# crc

5490 - 5690, SF 48 holes
Acidize w/2500 gal,
Frac w/121,993 gal Silverstem, 156,880# 16/30, 41,008# crc

Cmt w/70 sx lead, 400 sx tail, circ 159 sx
5 1/2" 17.0 # J-55 ST&C csg @ 6,030'.

PBTD - 5987

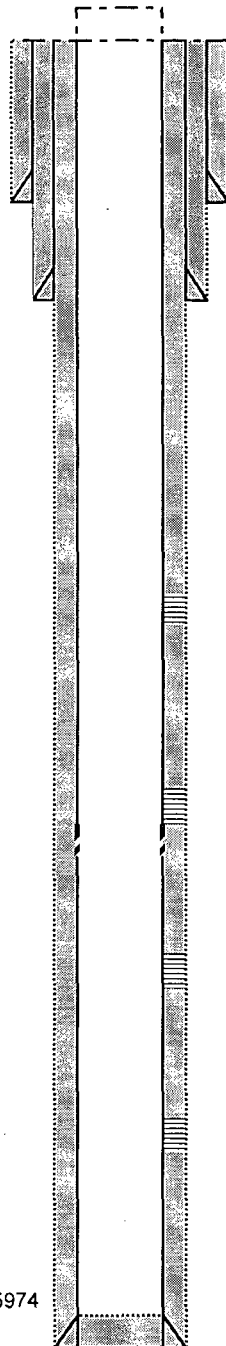
COG OPERATING LLC

Lease & Well #
30 015 36488

Texaco BE #11

Eddy Co, NM
Sec 16 B T17S R30E 340 FNL & 1650 FEL

Elevation GL - 3692



13 3/8" 48# H-40 STC csg @ 445',
180 sx. Thixset, 180 sx 35/65/6 lead #2, 200 sx tail Circ 180 sx
8 5/8" 24# J-55 Stc @ 1270', 400 sx Lead, 200 sx tail circ. 179 sx.

Paddock

4376 - 4694', 1 spf 33 holes
Acidized w/3000 gal 15% NEFE
Frac w/98,783 gal lightning, 144,600# 16/30, 15,000# siberprop
2/29/2010

Blinebry

4900 - 5100', SF 36 holes
Acidized w/2500 gal,
Frac w/118,503 gal Silverstem, 155,790# 16/30, 31,425# crc

5220 - 5420, SF 36 holes
Acidized w/2500 gal,
Frac w/113,751 gal Silverstem, 139,934# 16/30, 33,055# crc

5490 - 5690, SF 48 holes
Acidize w/2500 gal,
Frac w/116,391 gal Silverstem, 145,284# 16/30, 34,925# crc

Cmt w/600 sx lead, 400 sx tail, circ 134 sx
5 1/2" 17.0 # J-55 ST&C csg @ 6,020'.

PBTB - 5974

VII.

COG Operating, LLC
Texaco BE #8
API# 30-015-35767
Sec 16, T17S, R30E, Unit B
330' FNL & 2310' FEL
Eddy County, NM

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
 - **Average daily rate/volume 1,000 BWPD, Maximum daily rate/volume 2,000 BWPD**
2. Whether the system is open or closed;
 - **Closed System**
3. Proposed average and maximum injection pressure;
 - **Average injection pressure 2,000 psi, Maximum injection pressure 2,000 psi**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 - **Formation water analysis attached**
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
 - **Not for disposal purposes**



Catalyst Oilfield Services
 11999 E Hwy 158
 Gardendale, TX 79758
 (432) 563-0727
 Fax: (432) 224-1038

Water Analysis Report

Customer:	COG Operating LLC - NM	Sample #:	9574
Area:	Artesia	Analysis ID #:	778
Lease:	TEXACO BE		
Location:	8		0
Sample Point:	Wellhead		

		mg/l		meq/l	mg/l		meq/l
Sampling Date:	2/19/08	Anions			Cations		
Analysis Date:	2/22/08	Chloride:		119130.9	Sodium:		58471.1
Analyst:	Mitchell Labs	Bicarbonate:		134.4	Magnesium:		1952.0
TDS (mg/l or g/m3):	193806.9	Carbonate:			Calcium:		13467.0
Density (g/cm3):	1.135	Sulfate:		650.0	Strontium:		
Hydrogen Sulfide:				13.53	Barium:		
Carbon Dioxide:	60				Iron:		1.1
Comments:		pH at time of sampling:		6.6	Manganese:		0.400
		pH at time of analysis:					0.04
		pH used in Calculation:		6.6			0.01
		Temperature @ lab conditions (F):		75	Conductivity (micro-ohms/cm):		227500
					Resistivity (ohm meter):		.0440

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.53	7.85	-0.19	0.00	-0.17	0.00	0.00	0.00	0.00	0.00
100	0.60	9.30	-0.26	0.00	-0.17	0.00	0.00	0.00	0.00	0.00
120	0.66	10.46	-0.31	0.00	-0.15	0.00	0.00	0.00	0.00	0.00
140	0.73	11.92	-0.36	0.00	-0.10	0.00	0.00	0.00	0.00	0.00

COG OPERATING LLC

Lease & Well #
API # 30-015-35253
Spud - 5-2-2007
Elevation GL - 3680

Texaco BE #8

Eddy Co., NM
Sec 16 B T17S R30E 330 FNL & 2310 FEL
KB

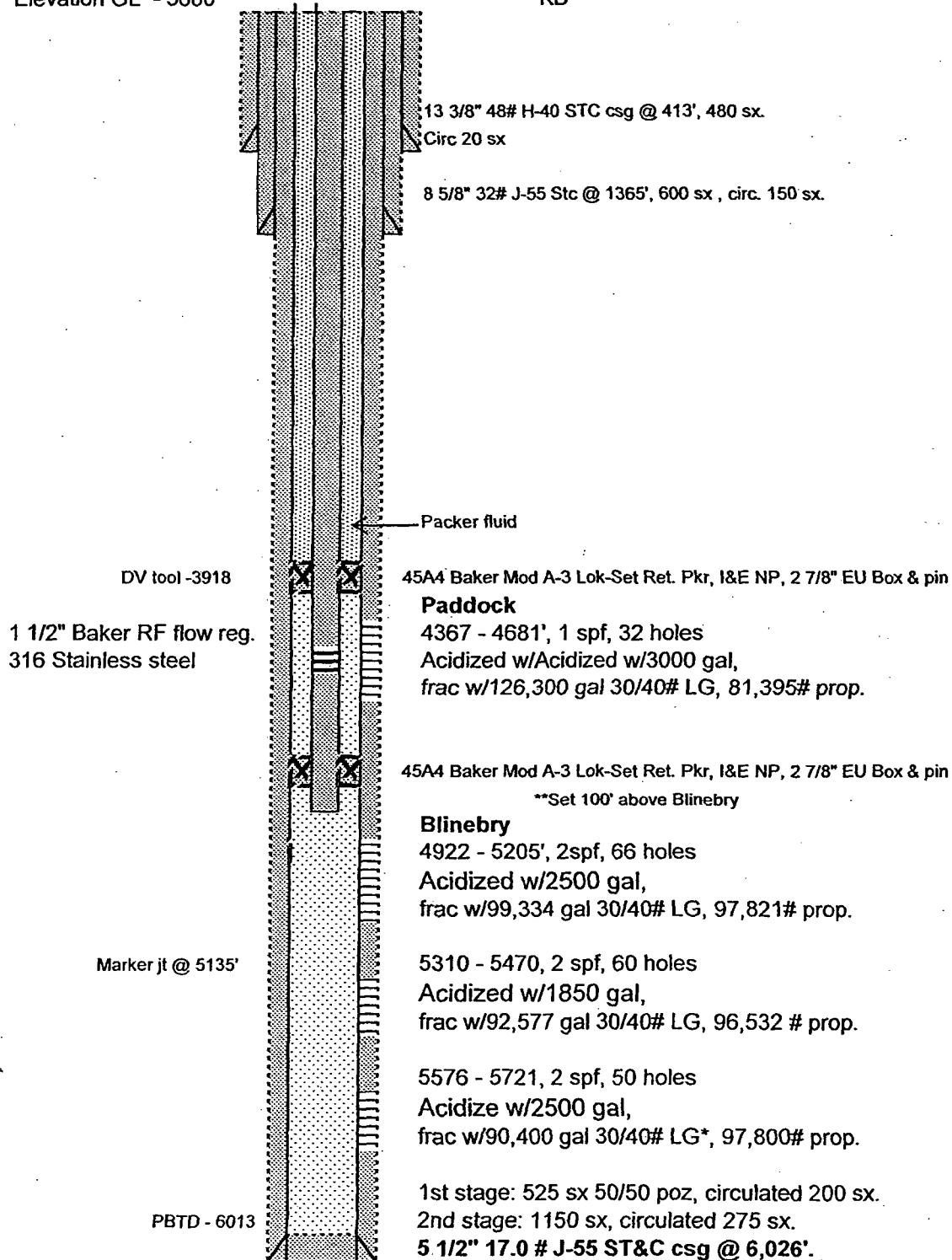


Exhibit VIII
Geological Review
Ground Water Sources
Empire, Empire East, and Loco Hills Fields
Eddy County, New Mexico

The intervals under consideration for secondary recovery operations include the Glorieta/Paddock and Blinebry formations collectively referred to as the Yeso. Both intervals are in the Leonardian Group of the Lower Permian Age located on the Northwest Shelf of the Delaware Basin in the western part of the Permian Basin.

The injection intervals are the following:

Continental A #11 (Empire Field)

- Paddock 3,926'-4,277'
- Blinebry 4,436'-5,088'

Continental A #12 (Empire Field)

- Paddock 3,811'-4,044'
- Blinebry 4,300'-5,293'

Houma St #4 (Loco Hills Field)

- Paddock 4,338'-4,647'
- Blinebry 4,880'-5,740'

Mesquite St #15 (Empire East Field)

- Paddock 3,874'-4,215'
- Blinebry 4,336'-5,289'

Produced water from Lower Permian Age rocks is too mineralized to be potable or useable for live stock.

Ground water in Eddy County is obtained from porous and permeable aquifers in consolidated rocks of the Upper Permian and Triassic age and in relatively unconsolidated sediments of Tertiary and Quaternary age.

The area east of the Pecos River is a large area and includes half of Eddy County, generally from T 16 S R 27 E to T 26 S R 31 E, extending from the Chaves County line south to the Texas State line and east to the Lea County line.

The Triassic System overlies the Rustler formation in Eddy County and is composed of red beds and sandstones of the Dockum group. The lower part of these beds is considered Permian and correlated with Dewey Lake red beds by some geologists. The total thickness of the Dockum group east of Artesia is about 1,000'. Formations of the Dockum group exposed in Eddy County are the Pierce Canyon red beds, the Santa Rosa sandstone and red beds possibly from the Chinle formation.

In the Empire, Empire East, Loco Hills, and Fren Fields, the sandstone beds in the Triassic Dockum group and possibly in the Dewey Lake red beds are the chief sources of ground water. The depth to water in this area is generally less than 300'. Most of the wells in the outcrop area of the Dockum group yield water of better quality than the wells to the west that produce from the Rustler formation. Analyses were made of 21 samples of water from wells probably taking all or part of their water from the Triassic red beds. The hardness of calcium carbonate in the 21 samples ranged from 201 to 3,590 ppm and was more than 1,000 ppm in 14 of the 21 samples. The chloride content ranged from 17 to 785 ppm and was more than 200 ppm in 10 of the samples. Probably about half the wells in the Triassic red beds produce water that is considered usable for domestic purposes. None of the wells in the Triassic red beds produce water too highly mineralized for stock.

A review of all geologic map data and well as visual searches by field personnel did not indicate the presence of any windmills in the areas of review for the proposed conversions.

In summary, ground water in the Empire, Empire East, Loco Hills, and Fren areas for stock and domestic use can be obtained from wells in the Triassic red beds at depths up to 300'. Water is generally of fair quality but locally impotable. The injection intervals for the proposed conversions are in the Yeso group in the lower Permian age rocks at about 3,800' to almost 5,300'. No contamination of the known shallow potable ground waters is expected from the proposed deeper secondary operations due to over 3,500' of vertical separation between the them. There was no indication of any use of ground water aquifers in the areas of reviews for the proposed conversions.

From Geology and Ground-Water Resources of Eddy County, New Mexico by G. E. Hendrickson and R. S. Jones. Ground-Water Report 3, New Mexico Bureau of Mines and Mineral Resources, 1952

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-34742
Indicate Type of Lease STATE ☒ FEE ☐
State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Texaco BE
8. Well Number 8
9. OGRID Number 229137
10. Pool name or Wildcat 96718 Loco Hills;Glorieta,Yeso

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	
2. Name of Operator COG Operating LLC	
3. Address of Operator 550 W. Texas Ave., Suite 1300 Midland, TX 79701	
Well Location Unit Letter <u>B</u> : <u>330'</u> feet from the <u>North</u> line and <u>2310'</u> feet from the <u>East</u> line Section <u>16</u> Township <u>17S</u> Range <u>30E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3680 GR	
Pit or Below-grade Tank Application ☐ or Closure ☐	
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____	
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Convert in injection ☒

☐ OTHER:

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating, LLC would like permission to convert this oil well into an injection well.

Please see the attached procedure.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE K. Carrillo TITLE Regulatory Analyst DATE 1/06/10

Type or print name Kanicia Carrillo E-mail address: kcarrillo@conchoresources.com Telephone No. 432-685-4332
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any): _____

COG Operating Procedure

Texaco BE #8

Loco Hills Field

Eddy County, NM

TWP: 17 S – Range: 30 E – Sec . 16

Additional Well info listed below procedure:

Objective: Convert the well from a Paddock and Blinebry producer to a Paddock and Blinebry water injection well. (Pumping unit will be moved prior to conversion.)

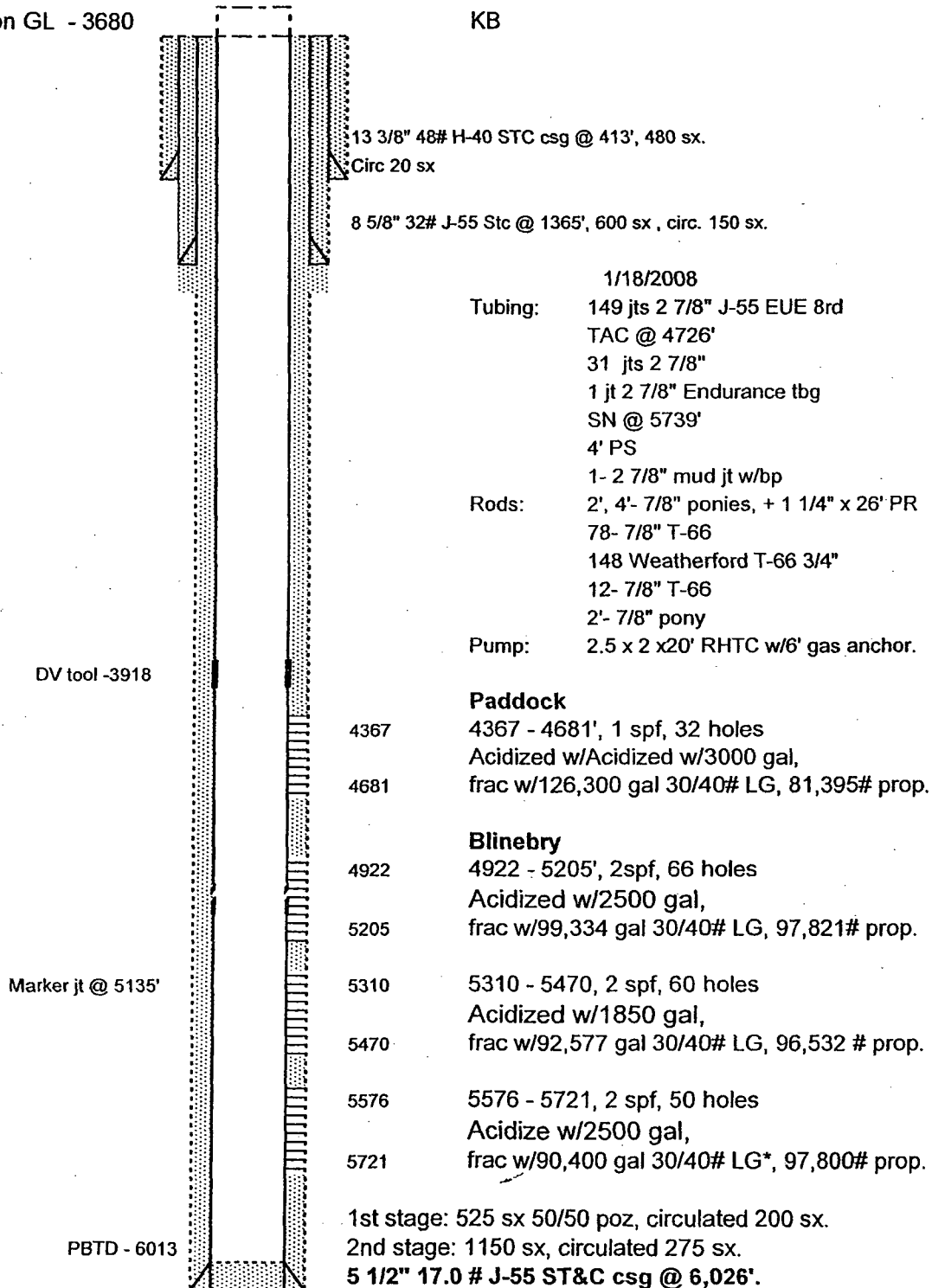
1. MIRU, Tag PBTD, POH w rods, pump, and tbg. (PBTD @ 6013')
2. Run a 4 ¾" bit and 5 ½" csg scraper and clean out to PBTD.
3. TIH w PKR and 2 7/8" tbg and set PKR @ 5476'.
4. Acidize Blinebry perms 5576'-5721' with 1,000 g 15%. Flow back and swab if necessary.
5. TIH w PKR and RBP and set RBP @ 5550' and PKR at 5250'.
6. Acidize Blinebry perms 5310'-5470' with 1,000 g 15%. Flow back and swab if necessary.
7. TIH w PKR and RBP and set RBP @ 5260' and PKR @ 4822'.
8. Acidize the Blinebry perms 4922'-5205' with 1,000 g 15%. Flow back and swab if necessary.
9. TIH w PKR and RBP and set RBP @ 4750' and PKR @ 4267'.
10. Acidize the Paddock perms 4367'-4681' with 1,000 g 15%. Flow back and swab if necessary.
11. TIH with 2 7/8" injection tbg and injection PKR and set PKRS at 4267' & 4822'. Test csg and tbg to 2000 psi. Circulate 65 bbls of PKR fluid between 2 7/8" tbg and 5 ½" csg.
12. Begin injection as permitted on the C108.

Concho

Lease & Well # Texaco BE #8

Elevation GL - 3680

KB

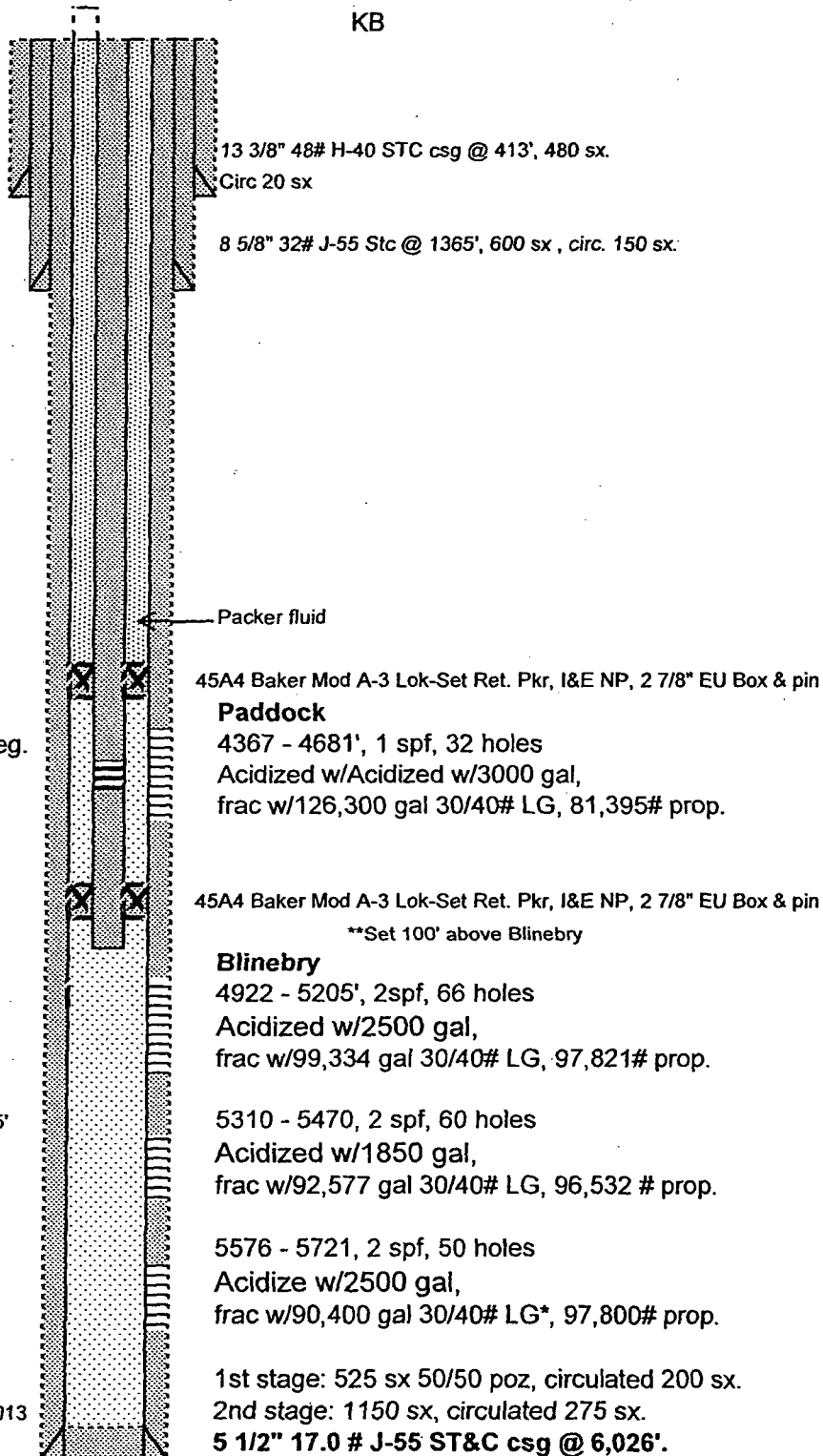


Concho

Lease & Well #
API # 30-015-35253
Spud - 5-2-2007
Elevation GL - 3680

Texaco BE #8

Eddy Co., NM
Sec 16 B T17S R30E 330 FNL & 2310 FEL
KB



5-1/2" RETRIEVAL INJECTION SYSTEM

CUSTOMER: COG OPERATING, LLC

COUNTRY: USA FIELD: NA

QUOTATION NO. JH10010003.COBELL NO. GC FED VARIOUS

DRAWING NO. 5.5_RF_Regulators_COG_GC Federal_Project.dwg

APPROVED BY: ERIC MCCLUSKY

DRAWN BY: JAY HARDESTY

DATE: 01-07-09



Baker Oil Tools

Normal Illustration
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MAX. O.D.	MIN. I.D.	WELL SCHEMATIC	DESCRIPTION	LENGTH	DEPTH
		1	TUBING HANGER SIZE: THREADS: MATERIAL: PRODUCT FAMILY#		
3.668"	2.441"	3	INTERNALLY PLASTIC COATED INJECTION L. TU BING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILY#		
4.789"	2.600"	4	MODEL C-1 TANDEM TENSION PACKER WITH UHL OADER SIZE: 45A4 THREADS: 2-3/8" 4.7 LBS/FT EUE MATERIAL: 316 STAINLESS STEEL PRODUCT FAMILY#		
3.668"	2.441"	5	TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILY#		
4.750"	1.995"	6	2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & 2 ENP, 316 SS RCLATCH AND RF REGULATOR SIZE: 2-3/8" THREADS: 2-3/8" 4.7 LBS/FT EU BOX X PIN MATERIAL: J-55 PRODUCT FAMILY#		
3.668"	2.441"	7	TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILY#		
4.641"	1.966"	8	MODEL A-3 LOK-SEY RETRIEVBABLE CASING PAC KER SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: P-110 PRODUCT FAMILY#		
3.668"	2.441"	9	TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILY#		
4.750"	1.995"	10	2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & 2 ENP, 316 SS RCLATCH AND RF REGULATOR SIZE: 2-3/8" THREADS: 2-3/8" 4.7 LBS/FT EU BOX X PIN MATERIAL: J-55 PRODUCT FAMILY#		
		12	BULL PLUG SIZE: 2-7/8" THREADS: MATERIAL: PRODUCT FAMILY#		



WELL CHRONOLOGY REPORT

WELL NAME : TEXACO BE #8
DIVISION: NEW MEXICO
EVENT: 50
FIELD : LOCO HILLS
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35253
PLAN DEPTH :
SPUD DATE : 05/02/2007
DHC : CWC :
AFE TOTAL :
FORMATION: YESO / GLORIETA
REPORT DATE: 04/30/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

MIRU Silver Oak Rig #1, Did not get rigged up, short on trucks

REPORT DATE: 05/01/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Spud 17 1/2" hole at 9:00am, 5/01/2007 TD 17 1/2" hole at 421'

REPORT DATE: 05/02/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Ran 11Jts. 13 3/8", H-40, 48#, ST&C, 413', Cement with 180sx "H" Thickset, 300sx 35/65/6"C", 448sx Class"C"+2%CaCl2, Plug down at 1:20am, 5/2/2007. Circ. 20sx.

REPORT DATE: 05/03/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

421' Rig repair, changed out rotary table and torque converter on #1 floor motor.

REPORT DATE: 05/04/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Drlg 12 1/4 hole at 1212' Ftg made 791'. Ran 33 Jts 8 5/8, J-55, 32#, 1365', C/w 600sx 35/65/6C+, circ 150sx, plug down at 7:15pm 5/4/2007.

REPORT DATE: 05/05/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Nipp up and test BOP.1365'

REPORT DATE: 05/06/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Drlg 7 7/8 hole at 2170', Ftg made 798', MW 9.1, Vis 29, pH 10, Survey at 2011' 3/4 Deg

REPORT DATE: 05/07/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Drlg 7 7/8 hole at 2930', Ftg made 760', Survey at 2595' 1 Deg.

REPORT DATE: 05/08/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Drlg 7 7/8 hole at 3654', Ftg made 734', Surveys at 3044'-1/2deg., 3494'-1/2deg., MW 9.1, Vis 29, PH 10,



WELL CHRONOLOGY REPORT

WELL NAME : TEXACO BE #8		DIVISION: <u>NEW MEXICO</u>	EVENT: <u>50</u>
LD : LOCO HILLS		LOCATION :	
COUNTY & STATE : EDDY		CONTRACTOR :	
WI % :	AFE # :	API # : <u>30-015-35253</u>	PLAN DEPTH :
DHC :	CWC :	AFE TOTAL :	SPUD DATE : <u>05/02/2007</u>
			FORMATION: <u>YESO / GLORIETA</u>

REPORT DATE: 05/09/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Drig 7 7/8 hole at 4315', Ftg made 661', Survey at 3972' 1/2 Deg. MW 9.1, Vis 29, pH10

REPORT DATE: 05/10/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Drig 7 7/8 hole at 4945', Ftg made 630', Survey at 4888' 1/2 Deg. MW 9, Vis 29, pH 10.

REPORT DATE: 05/11/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Drig 7 7/8 hole at 5325', Ftg made 380', MW 9.0, Vis 29, pH10

REPORT DATE: 05/12/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Drig 7 7/8 hole at 5325', Ftg made 380', MW 9.0, Vis 29, pH10

REPORT DATE: 05/13/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

TD 7 7/8 hole at 6030', Ftg made 205', Survey at 6030'-1deg., MW 9.0, Vis 29, PH 10, Sweep hole , TOH for logs, Loggers TD 6032', TIH,

REPORT DATE: 05/14/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Ran 139Jts., 5 1/2", J-55, 17#, ST&C, 6026', Cement with (first stage) 525sx 50/50/2"C", plug down, open tool, Circ. 200sx, Circ. 6hrs., (second stage) 200sx 35/65/6"C", 950sx 50/50/2"C", Plug down at 4:00pm, 05/14/2007, Circ. 275sx

REPORT DATE: 05/15/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Rig Release 7pm 5/14/2007

REPORT DATE: 05/16/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Wait on trucks to move off of Texaco BE #8 to Harper State

REPORT DATE: 05/17/2007 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**

DAILY : DC: \$0 **CC:** \$0 **TC:** \$0

CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

WOC



WELL CHRONOLOGY REPORT

WELL NAME : TEXACO BE #8
DIVISION: NEW MEXICO
EVENT: 50
FIELD : LOCO HILLS
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35253
PLAN DEPTH :
SPUD DATE : 05/02/2007
DHC : CWC :
AFE TOTAL :
FORMATION: YESO / GLORIETA
REPORT DATE: 05/18/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
WOC
REPORT DATE: 05/21/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
WOC
REPORT DATE: 05/22/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
WOC
REPORT DATE: 05/23/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
WOC
REPORT DATE: 05/24/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

MIRU Rig #80. PU DC and tbg. RIH Drill out dv tool. Pressure test to 500#. Finish RIH to PBTD. Circulate hole clean. POH SU tbg LD DC. RU Schlumberger. Pull CBL and shoot 1st set of perms. 5576'-5721' (Blinebry). 25settings. 2SPF. 50holes 0.41hole. RD Schlumberger. RIH w/ PPI leave hanging above perms. SDFD.

REPORT DATE: 05/25/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU BJ for 2500gal 15% HCl PPI/acid job. Spot 13bbbls HCL for PPI. PPI all holes open 0comm. Acid job w/ 47bbbls. Dropped 100ball. Balled off to 5000# w/ 100 balls on. AR-6bpm. AP-2400# ISIP-1500# 5min-1367# 10min-1302# 15min-1286# RD BJ. Unset PKR. POH. ND BOP. NU 5m frac valve.

REPORT DATE: 05/29/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

5tank hybrid frac on 1st set of perms 5576'-721' 50 holes. 90,401 gals 30#/40# linear gel, 8,000 lbs LiteProp 125 14/30, 74,780 lbs White sand 16/30 and 15,040 lbs SiberProp 16/30. Min psi-2792, avg psi-3150, max psi-3304, avg rate-80 BPM. ISIP-2080, 5 min.-1714, 10 min.-1622, 15 min.-1597.

REPORT DATE: 05/30/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP 1200#. Flow well back. ND frac valve and goathead. NU BOP. RU Schlumberger shoot 2nd set of perms. 5310'-5470' (Blinebry). 30settings. 2SPF. 60holes. 0.41"hole. RD Schlumberger. RIH w/ PPI and RBP. Set RBP. PU leave PPI hanging above perms SDFD.



WELL CHRONOLOGY REPORT

WELL NAME : TEXACO BE #8
DIVISION: NEW MEXICO
EVENT: 50
ELD : LOCO HILLS
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35253
PLAN DEPTH :
SPUD DATE : 05/02/2007
DHC : CWC :
AFE TOTAL :
FORMATION: YESO / GLORIETA
REPORT DATE: 05/31/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU BJ for 2500gal PPI/acid job. Spot 15bbbls 15% HCL for PPI. PPI all holes open 1comm. Acid job w/ 45bbbls. Dropped 125balls. Balled off to 5000# w/ 96balls on. Surge balls off continue w/ flush. AR-6bpm. AP-2400#. ISIP-1454# 5min-1156# 10min-1097# 15min-1061# RD BJ. POH get ready to frac.

REPORT DATE: 06/01/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

5tank hybrid frac on -2nd set of perfs 5310-5470' 60 holes. 92,577 gals 30#/40# linear gel, 8,032 lbs LiteProp 125 14/30, 73,500 lbs White sand 16/30 and 15,000 lbs SiberProp 16/30. Min psi-2174, avg psi-3100, max psi-3892, avg rate-81.5 BPM. ISIP-1840, 5 min.-1513, 10 min.-1456, 15 min.-1412.

REPORT DATE: 06/04/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

ND frac valve and goathead. NU BOP. RIH w/ overshot wash 45' of sand off of BP. POH. RU Schlumberger. Shoot 3rd set of perfs. 4922'-5204' (Blinebry). 33settings. 2SPF. 66holes. 0.41" hole. RD Schlumberger. RIH w/ PPI and RBP. Set RBP. PU leave PPI hanging above perfs. SDFD.

06/0507PPI/acidize 3rd set of perfs 4922'-5204' 66 holes with 2500 gals 15% NEFE and 198 ball sealers. Every perf open, had 42 Bbbls left for ball job, ball out to 5000 psi w/105 balls, avg psi-2100, avg rate-6 BPM. ISIP-1678, 5 min.-1573, 10 min.-1542, 15 min.-1520. Unset PPI tool and POH. ND wellhead and NU frac valve.

Daily Cost: \$28,560 Cum Cost: \$28,560

REPORT DATE: 06/06/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

5 tank hybrid frac on 3rd set of perfs 4922'-5204', 99,334 gals 30#/40# linear gel, 8,021 lbs LiteProp 125 14/30, 74,740 lbs White sand 16/30 and 15,060 lbs SiberProp 16/30. Min psi-1850, avg psi-3000, max psi-4435, avg rate-80.1 BPM. ISIP-1825, 5 min.-1574, 10 min.-1517, 15 min.-1480.

Daily Cost: \$109,221 Cum Cost: \$137,780

REPORT DATE: 06/07/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP-250, bled off and ND frac valve. NU wellhead and BOP and RIH w/retrieving head. Washed 190' sand, unset RBP and POH. RIH w/SN and TAC, washed 45' sand and landed SN @ 5739' w/181 jts 2 7/8" J-55 tbg. TAC @ 4726' w/149 jts. RIH with 2 1/2"x2"x24" RHTC PAP pump, 148 new Weatherford T-66 3/4" rods and 78 new Weatherford T-66 7/8" rods. Space out with 2' pony and hang on. Rig down.

Daily Cost: \$28,335 Cum Cost: \$166,115

REPORT DATE: 06/08/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 06/09/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

78 oil 134 gas (total for all Texaco BE)



WELL CHRONOLOGY REPORT

WELL NAME : TEXACO BE #8
DIVISION: NEW MEXICO
EVENT: 50
ELD : LOCO HILLS
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35253
PLAN DEPTH :
SPUD DATE : 05/02/2007
DHC :
CWC :
AFE TOTAL :
FORMATION: YESO / GLORIETA
REPORT DATE: 12/11/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU unit #81 POH w/rods & pump. NU frac valve & SD.

Daily Cost: \$11,380 Cum Cost: \$11,380

REPORT DATE: 12/12/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

POH w/tbg. RU Schlumberger & set wireline RBP @ 4720' perf 4th set 4367-4681' 1 SPF 32 holes. NU frac valve.

Daily Cost: \$14,400 Cum Cost: \$25,780

REPORT DATE: 12/13/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU BJ & breakdown 4th set perfs 4367-4681' (Paddock) 1 SPF 32 holes @ 3215# @ 6.2 bpm. Spearhead 3000 gals 15% HCL ahead @ 11 bpm @ 2072#. Pump 6132 gals 40# linear gel pad. Pump 600# Scalesorb-3 thru all sand. Start 1/4# 16/30 white sand in 40074 gals 40# Pump 8000# lite prop 125 14/30 .15-.35# in 31,626 gals 30# linear gel. Pump 67,442# 16/30 white sand 1/2#-3# in 41,328 gals 40#. Tail in w/13,953# Siber Prop 16/30 resin coated @ 3# in 7140 gals 40#. Flush w/4200 gals laden fluid. Avg. Rate 90 bpm Avg. Psi 3000# ISIP 1738# 5 min. 1472# 10 min. 1399# 15 min. 1353#..

Daily Cost: \$128,849 Cum Cost: \$154,629

REPORT DATE: 12/14/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Well on vac. RIH wash 50' sand release RBP & POH. RIH w/181 jts land SN @ 5739' TA @ 4159' w/131 jts. RIH w/2 1/2x2x20' RHTC pump w/2'x3/4" pony on top 148 3/4" rods 78 7/8" rods. 2'-4'x7/8" ponies.

Daily Cost: \$9,783 Cum Cost: \$164,412

REPORT DATE: 12/17/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Drove crew to location clean up and RD. 50 BO, 350 BW & 162 MCF

Daily Cost: \$1,790 Cum Cost: \$166,202

REPORT DATE: 12/18/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

34 BO, 340 BW & 95 MCF

REPORT DATE: 12/19/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

98 BO, 290 BW & 114 MCF

REPORT DATE: 12/20/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

NT

X.

Well Test - Oil, Gas, Water

Begin Date/Time	End Date/Time	Test Hours	Oil/Cond Volume	Frm Gas Volume	Water Volume	Info Only	Remarks
Texaco BE 8 12/30/2009	12/31/2009	24	26.00	59	94.00	No	

Logs on file.

XI.

COG Operating Procedure
Texaco BE #8
API# 30-015-35767
Sec 16, T17S, R30E, Unit B
330' FNL & 2310' FEL
Eddy County, NM

There are no fresh water wells in this area.

Exhibit XII
Geological Statement

Concho Resources has examined available geological, seismic, and engineering data and finds no evidence of open faults or any other hydrologic connection between the water flood zone and any underground source of drinking water.



January 22, 2010

Chevron USA Production Company
11111 S. Wilcrest
Houston, TX 77099

Certified Mail Article Number: 7009 2250 0001 0942 3950

Re: Application for injection well on the:

Texaco BE State #8
API# 30-015-35253
Sec 16, T17S, R30E, Unit B
Loco Hills; Glorieta, Yeso
Eddy County, New Mexico

To Whom It May Concern:

This letter will serve as notice under Rule 19.15.26.8B that COG Operating LLC has applied for a permit from the Oil Conservation Division in Santa Fe, NM to convert a producing well into a injection well. We will be injecting, for the purpose of secondary recovery, into the Paddock and Blinbry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinbry perfs are 4336.5 – 4573.

Should your company have any objection, it must be filed in writing within fifteen (15) days from the date of this notice. If the Oil Conservation Division determines the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505, the telephone number is 505-476-3440.

Sincerely,

COG Operating LLC

Kanicia Carrillo
Regulatory Analyst

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Return Receipt

Status: Delivered

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Detailed Results:

- Delivered, January 25, 2010, 10:02 am, HOUSTON, TX 77099
- Arrival at Unit, January 25, 2010, 4:07 am, HOUSTON, TX 77072
- Acceptance, January 22, 2010, 4:28 pm, MIDLAND, TX 79705

Notification Options

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- ☒ 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:

Chevron USA Production Company
11111 S Wilcrest
Houston, TX 77099

2. Article Number
(Transfer from service label)

7009 2250 0001 0942 3950

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Spett Card*☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

1-25-10

D. Is delivery address different from item 1? ☐ YesIf 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

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

U.S. Postal Service

CERTIFIED MAIL RECEIPT

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For delivery information visit our website at www.usps.com

HOUSTON, TX 77099

OFFICIAL USE

Postage

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Certified Fee

2.88

Return Receipt Fee
(Endorsement Required)

2.88

Restricted Delivery Fee
(Endorsement Required)

\$0.00

Total Postage & Fees

\$ 11.05



Sent To

Chevron USA Production Company
11111 S Wilcrest
Houston, TX 77099

PS Form 3800, August 2006

See Reverse for Instructions



January 22, 2010

Cimarex Energy Company
600 N Marienfeld
Suite 600
Midland, TX 79701

Certified Mail Article Number: 7009 2250 0001 0942 3943

Re: Application for injection well on the:

Texaco BE State #8
API# 30-015-35253
Sec 16, T17S, R30E, Unit B
Loco Hills; Glorieta, Yeso
Eddy County, New Mexico

To Whom It May Concern:

This letter will serve as notice under Rule 19.15.26.8B that COG Operating LLC has applied for a permit from the Oil Conservation Division in Santa Fe, NM to convert a producing well into a injection well. We will be injecting, for the purpose of secondary recovery, into the Paddock and Blinbry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinbry perfs are 4336.5 – 4573.

Should your company have any objection, it must be filed in writing within fifteen (15) days from the date of this notice. If the Oil Conservation Division determines the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505, the telephone number is 505-476-3440.

Sincerely,

COG Operating LLC

Kanicia Carrillo
Regulatory Analyst

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Track & Confirm

Search Results

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Enter Label/Receipt Number.

[Go >](#)

Your item was delivered at 11:06 AM on January 25, 2010 in MIDLAND, TX 79701.

Detailed Results:

- Delivered, January 25, 2010, 11:06 am, MIDLAND, TX 79701
- Acceptance, January 22, 2010, 4:27 pm, MIDLAND, TX 79705

Notification Options

Track & Confirm by email

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United States
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1. Article Addressed to: Cimarex Energy Company 600 N Marienfeld, Suite 600 Midland, TX 79701		B. Received by (Printed Name) <i>Samir Cana</i> C. Date of Delivery 1/25/10	
		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.	
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U.S. Postal Service
CERTIFIED MAIL RECEIPT
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MIDLAND, TX 79701

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Postage	\$ 4.50	0710 CLARK, DEB JAN 22 2010 Postmark here 01/22/2010
Certified Fee	\$2.85	
Return Receipt Fee (Endorsement Required)	\$2.50	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 10.00	

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Cimarex Energy Company
600 N Marienfeld, Suite 600
Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

Affidavit of Publication

NO.

20962

STATE OF NEW MEXICO

County of Eddy:

GARY D. SCOTT

being duly

sworn, says: That he is the **PUBLISHER** of The

Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and county and state, and that the here to attached

Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive week/days on the same day as follows:

First Publication December 24, 2009

Second Publication _____

Third Publication _____

Fourth Publication _____

Fifth Publication _____

Subscribed and sworn to before me this

24 Day

December

2010



OFFICIAL SEAL

Jo Morgan

NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 6/26/2012

Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

COG Operating, LLC is applying to convert four existing oil wells to water injection wells in Eddy County, New Mexico. The four wells, details, and locations are the following:

Continental - A State #11, located in the northwest quarter of section 30, T17S, R29E, Unit F, 1450'FNL & 1907'FWL, Empire Field, Yesso oil pool.

Continental - A State #12, located in the northwest quarter of section 30, T17S, R29E, Unit D, 330'FNL & 583'FWL, Empire Field, Yesso oil pool.

Mesquite State #15, located in the southwest quarter of section 20, T17S, R29E, Unit L, 1750'FSL & 990'FWL, Empire, East Field, Yesso oil pool.

Texaco BE #8, located in the northeast quarter of section 16, T17S, R30E, Unit B, 330'FNL & 2,310'FEL, Loco Hills Field, Yesso oil pool.

Water injection will be in the Paddock and Blinberry formations from approximately 3,800' to 5,300' at a maximum rate of 2,000 barrels of water per day and at a maximum surface pressure of 2,000 psig. Average rate and pressure will be 1,000 BWPD at 2,000 PSIG surface pressure.

Interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting Kanicia Carrillo, COG Operating, 550 W. Texas Ave., Suite 100, Midland, TX 79701. Phone number is 432-685-4332.

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