



COG Operating, LLC

Application for Waterflood in the Yeso pool.

Continental A State #11

API# 30-015-34742

Section 30, Township 17S, Range 29E, Unit F

1450' FNL & 1907' FWL

Eddy County, New Mexico

&

Continental A State #12

API# 30-015-35052

Section 30, Township 17S, Range 29E, Unit D

330' FNL & 583' FWL

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 OGRID 229137

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: CC DATE: 12/29/09

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:

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



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.



CE: 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] Continental A State #11

[A] Location - Spacing Unit - Simultaneous Dedication API# 30-015-34742
☐ NSL ☐ NSP ☐ SD

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.

Inicia Carrillo
 Print or Type Name

Signature

Regulatory Analyst
 Title

02/01/10
 Date

kcarrillo@conchoresources.com
 e-mail Address

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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[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]** Continental A State #12

[A] Location - Spacing Unit - Simultaneous Dedication API# 30-015-35052
☐ NSL ☐ NSP ☐ SD

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

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

Janicia Carrillo
 Print or Type Name

Signature

Regulatory Analyst
 Title

02/01/10
 Date

kcarrillo@conchoresources.com
 e-mail Address

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COG Operating, LLC

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Waterflood in the Yeso pool

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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 conformances, 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 conversions:

Continental A State #'s 11 and 12

- Shallow productive horizons include the Seven Rivers-Queen-Grayburg-San Andres (500'-4,000').
- Deep productive horizons include the Abo (5,900'-6,400') & Morrow (10,600'-10,800')

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 each completion is attached. For the Continental A State #11, the 15 min after frac ISIP varied from 809 PSIG in the Upper Blinbry to 856 PSIG in the Lower Blinbry. The 15 min after frac ISIP in the Paddock was 560 PSIG. For the Continental A State #12, the 15 min after frac ISIP varied from 1,106 PSIG in the Upper Blinbry to 1,493 PSIG in the Lower Blinbry. The 15 min after frac ISIP in the Paddock was 1,007 PSIG.

Notifications

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

- Offset Operators—BP America, Lime Rock Resources, Marbob, Mewbourne, & Nadel and Gussman
- WIO in COG's offsetting tracts—Chevron, Fasken Oil and Ranch, & Lobos Energy
- Leasehold—BLM and State Land Office

Raw/Time Graph

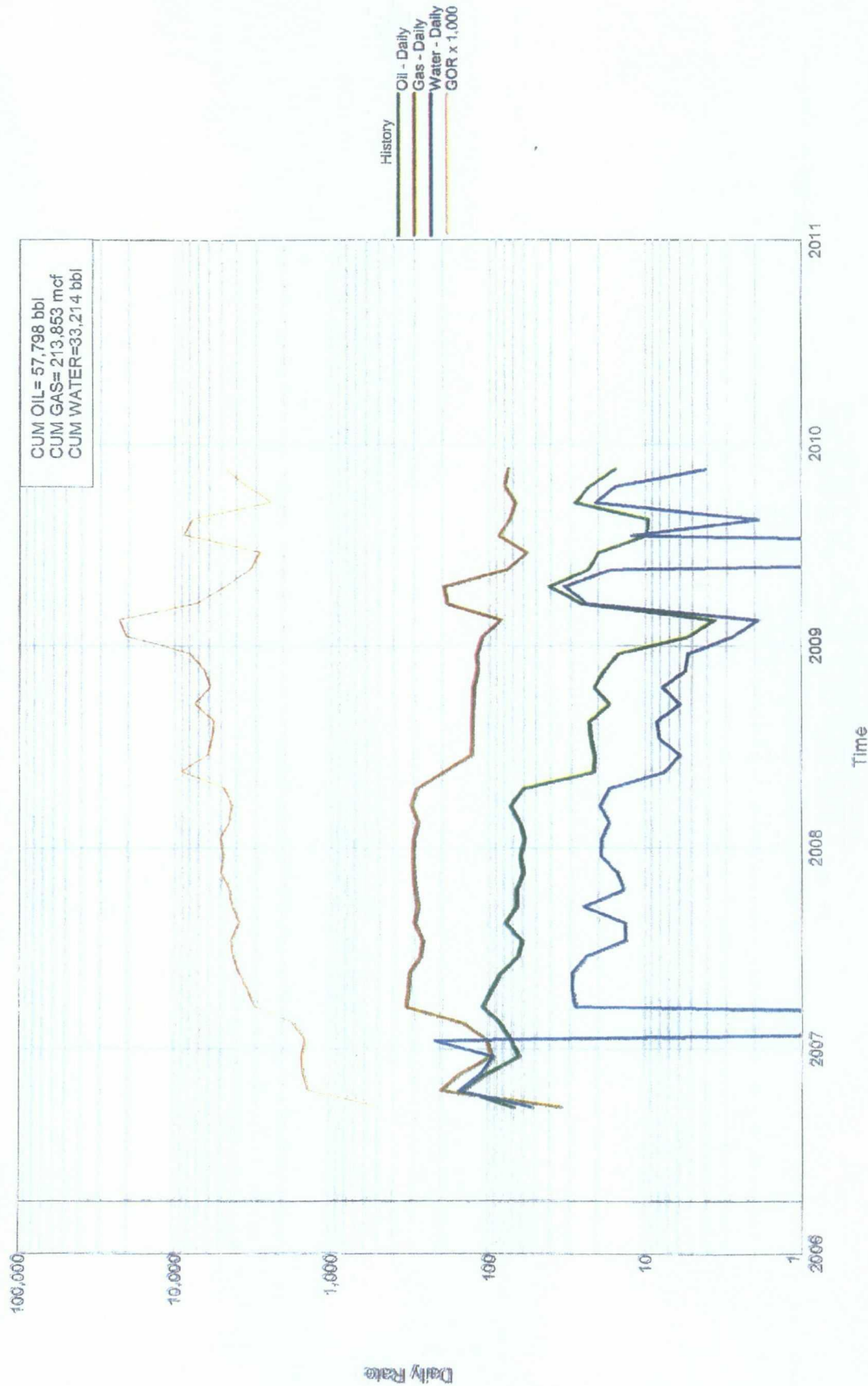
Lease Name: CONTINENTAL A STATE (11)
County, ST: EDDY, NM
Location: 30F 17S 29E NW SE NW

Project: u:\power tools\projects\dick\empire area 1.mdb

Date: 12/16/2009
Time: 9:44 AM

Operator: COG OPERATING LIMITED LIABILITY CORP
Field Name: EMPIRE

COG OPERATING LIMITED LIABILITY CORP CONTINENTAL A STATE (11) EMPIRE EDDY NM GLORIETA YESO 30F 17S 29E NW SE NW



Rate/Time Graph

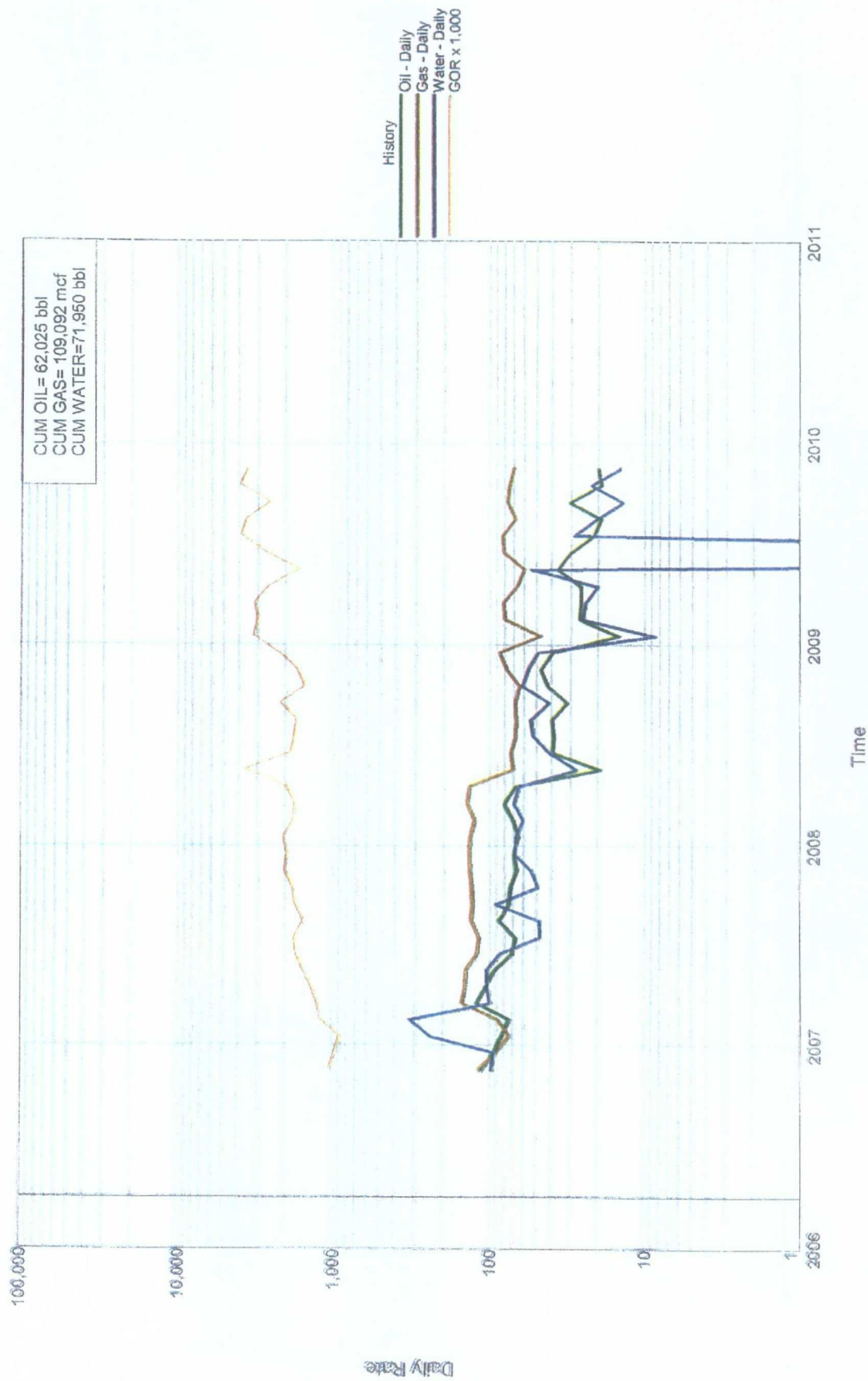
Lease Name: CONTINENTAL A STATE (12)
County, ST: EDDY, NM
Location: 30 17S 29E NW NW NW

Project: u:\power tools\projects\dick\empire area 1.mdb

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Time: 9:44 AM

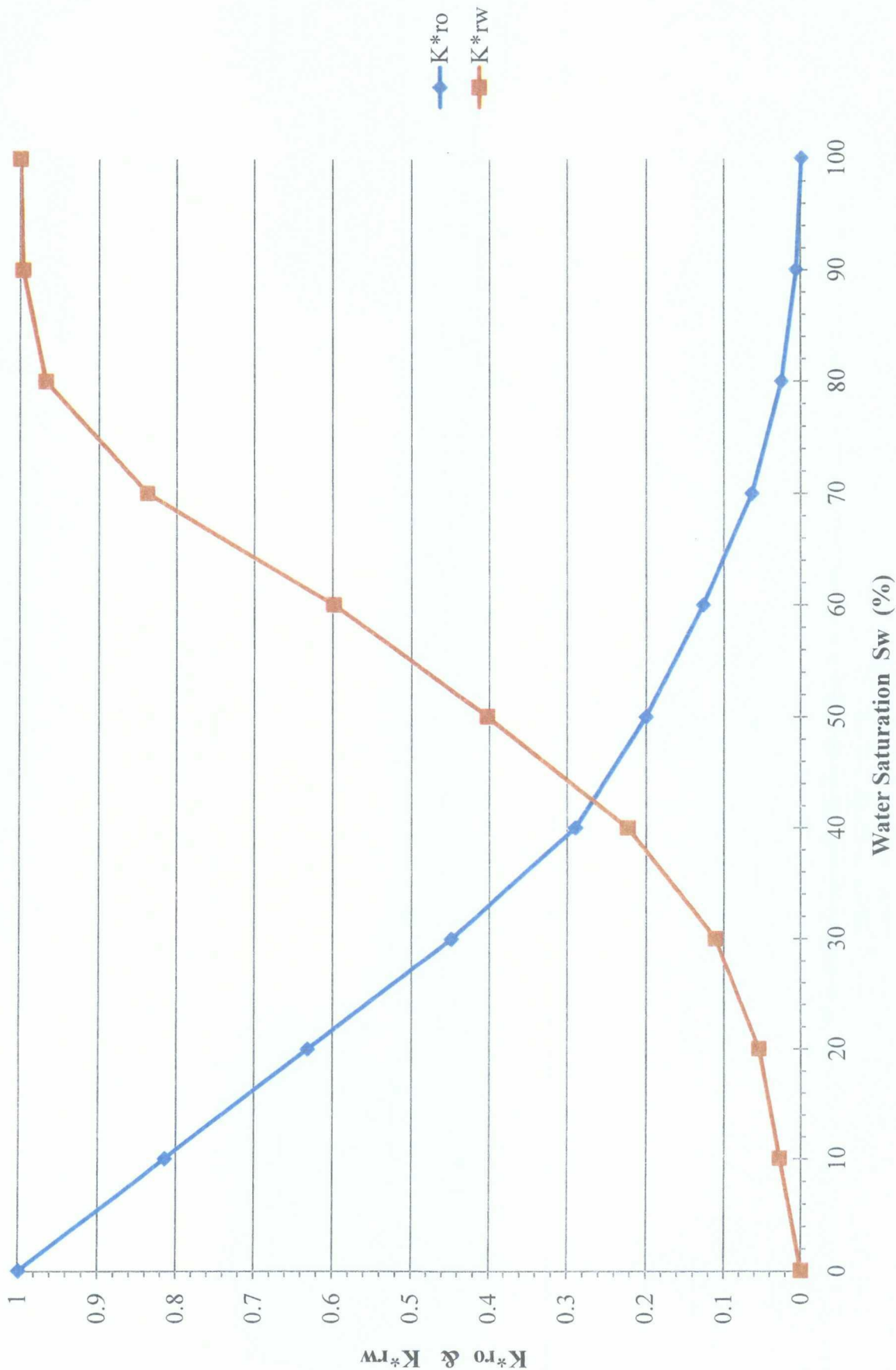
Operator: COG OPERATING LIMITED LIABILITY CORP
Field Name: EMPIRE

COG OPERATING LIMITED LIABILITY CORP CONTINENTAL A STATE (12) EMPIRE EDDY NM GLORIETA YESO 30 17S 29E NW NW NW



Skelly 971 R Perm Plot

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



COG Continental A SIBHP Data

WELL NAME	Continental A#12	
CSG PRESSURE:		102.1
FEET TO FLUID:		4396
JTS TO FLUID:		
GAS FREE LIQUID:		
COMMENTS:		SBHP 498.1
REMARKS:	24 Hr SIBHP 12/17/2009	
WELL NAME	Continental A#11	
CSG PRESSURE:		62.9
FEET TO FLUID:		3919
JTS TO FLUID:		
GAS FREE LIQUID:		
COMMENTS:		SBHP 273.3
REMARKS:	24 Hr SIBHP 12/17/2009	

III. Well Data

COG Operating, LLC
Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Eddy County, NM

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

Type of Packer: Tandem Packers with Down Hole Flow Regulators

Packer Setting Depth: 3826' & 4336'

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 3926' - 4277', Blinbry 4436 - 5088'

3. Name of Field or Pool (if applicable): Empire; Yeso, 96210

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: Yates-7 Rivers 500' - 906', Queen 2200' - 2240',

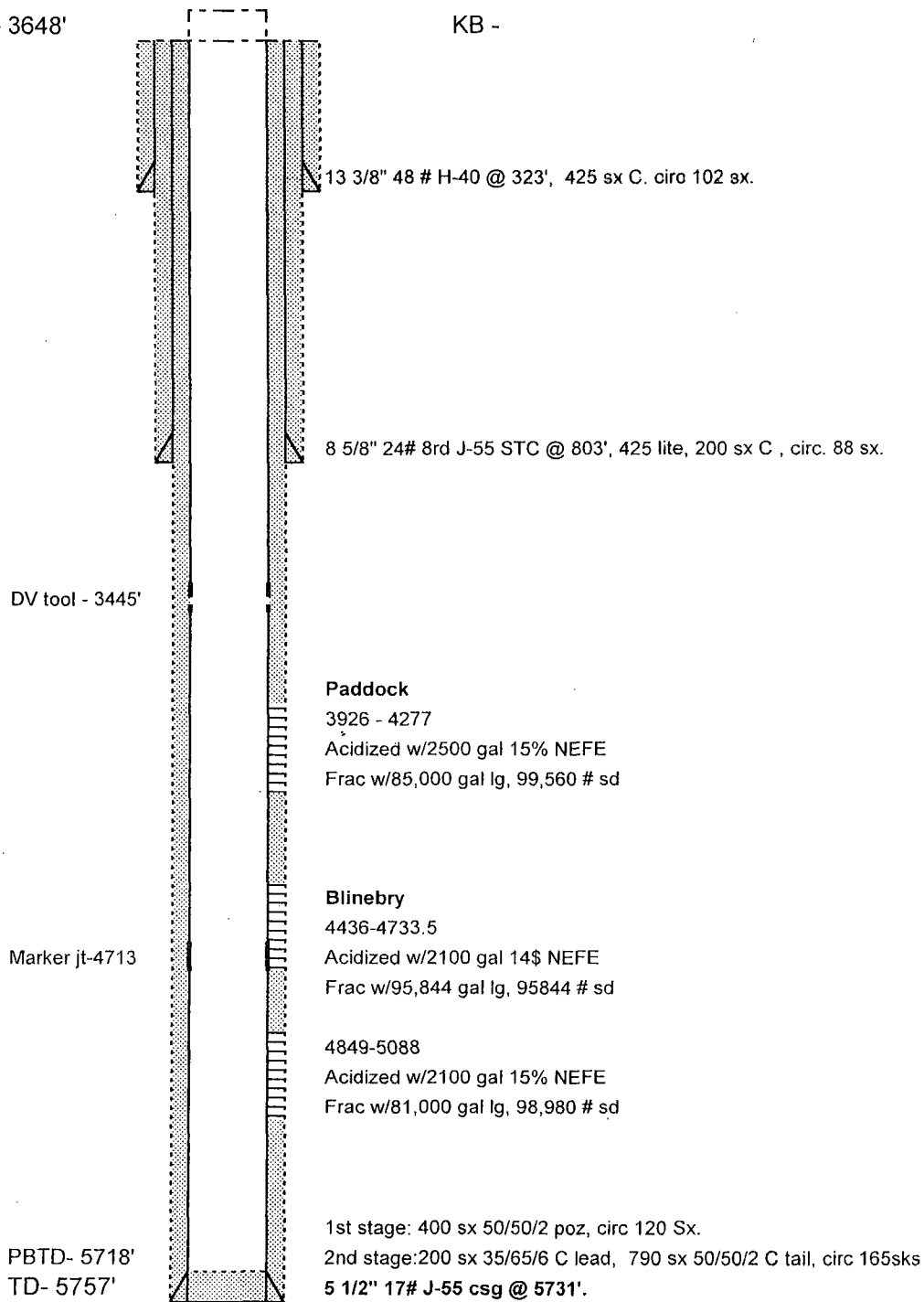
Grayburg-San Andres 2400' - ~~4000'~~, Abo 5900' - 6400', Morrow 10,600' - 10,800'

COG Operating LLC

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Eddy County, NM

Elevation - 3648'

KB -

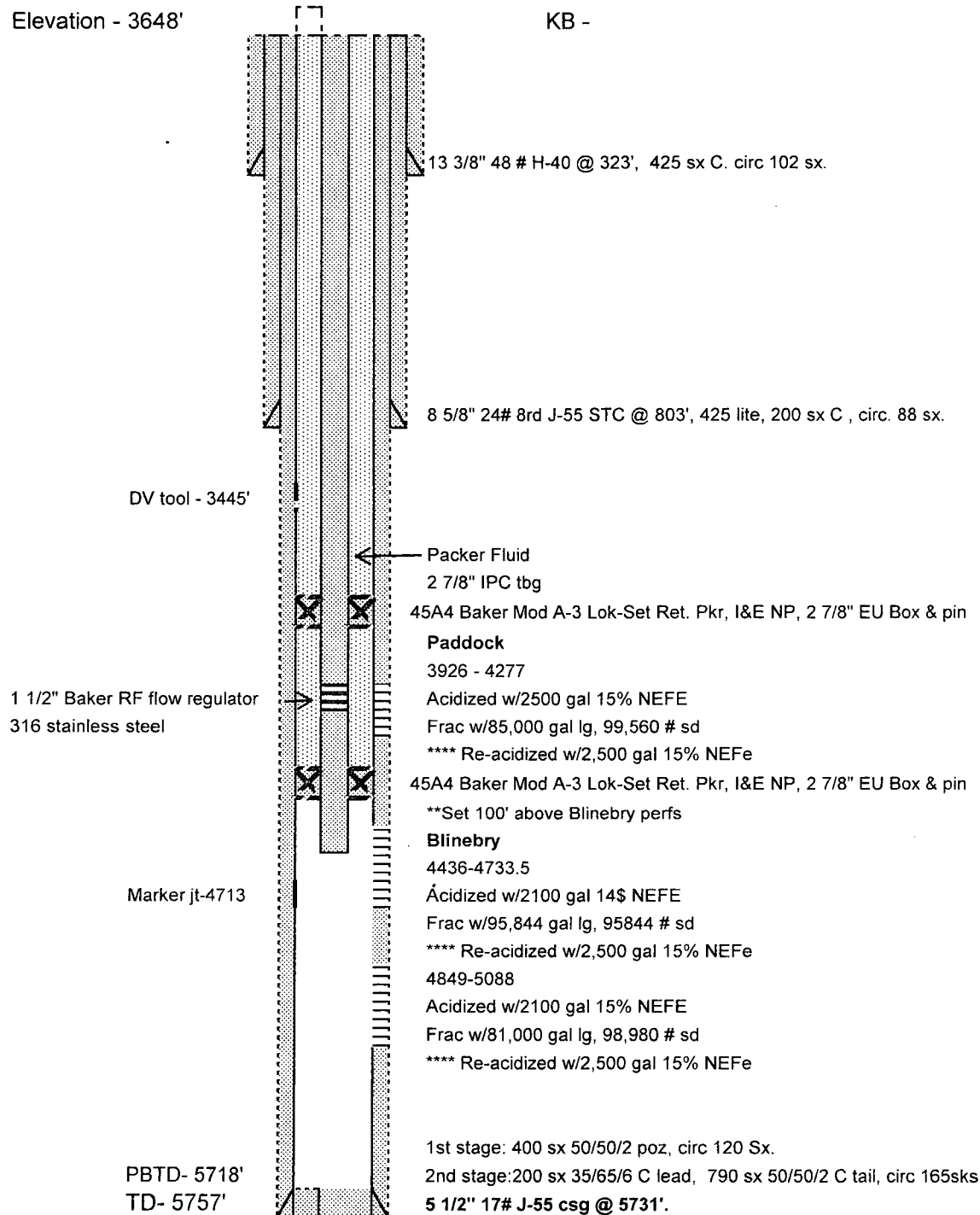


COG Operating LLC

Continental A State #11
 API# 30-015-34742
 Sec 30, T17S, R29E, Unit F
 1450' FNL & 1907' FWL
 Eddy County, NM

Elevation - 3648'

KB -



5-1/2" RETRIEVAL INJECTION SYSTEM

CUSTOMER: COG OPERATING, LLC

COUNTRY: USA

FIELD: NA

QUOTATION NO. JH10010003.COGWELL 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

Nominal 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 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH		
4.786"	2.000"		4 MODEL C-1 TANDEM TENSION PACKER WITH UNL OADER SIZE: 45A4 THREADS: 2-3/8" 4.7 LBS/FT EUE MATERIAL: 316 STAINLESS STEEL PRODUCT FAMILYH60226/		
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/		
4.750"	1.995"		6 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & E ENP, 316 SS RK LATCH 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"	1.968"		8 MODEL A-3 LOK-SET RETRIEVABLE CASING PACKER SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: P-110 PRODUCT FAMILYH64630/		
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/		
4.750"	1.995"		10 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & E ENP, 316 SS RK LATCH 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/		

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Continental A State #12
API# 30-015-35052
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330' FNL & 583' FWL
Eddy County, NM

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

Type of Packer: Tandem Packers with Down Hole Flow Regulators

Packer Setting Depth: 3711' & 4200'

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 3811' - 4044', Blinebry 4400' - 5292'

3. Name of Field or Pool (if applicable): Empire; Yeso, 96210

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: Yates-7 Rivers 500' - 906', Queen 2200' - 2240',

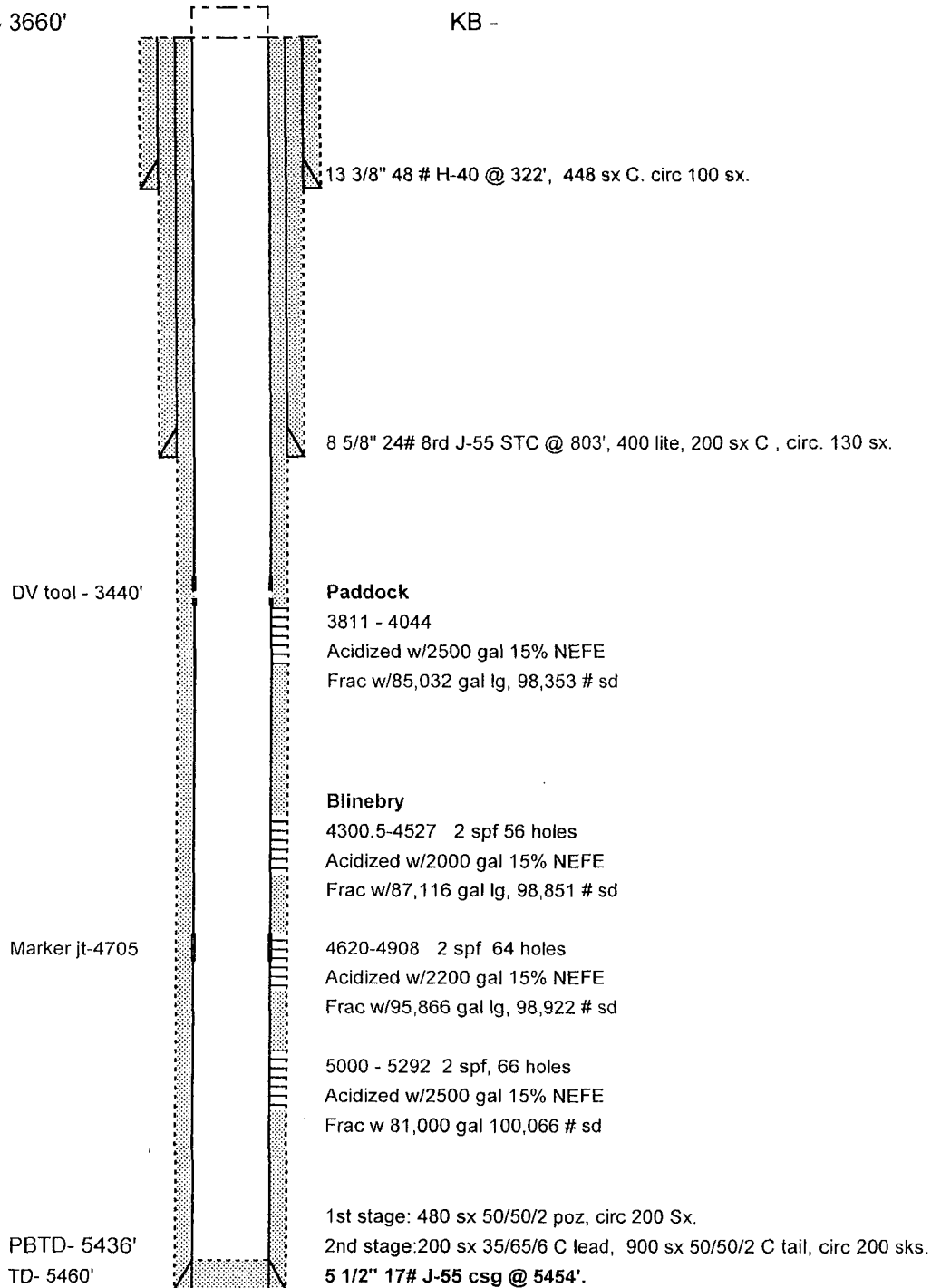
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 330' FNL, 583' FWL
 Eddy County, NM

Elevation - 3660'

KB -

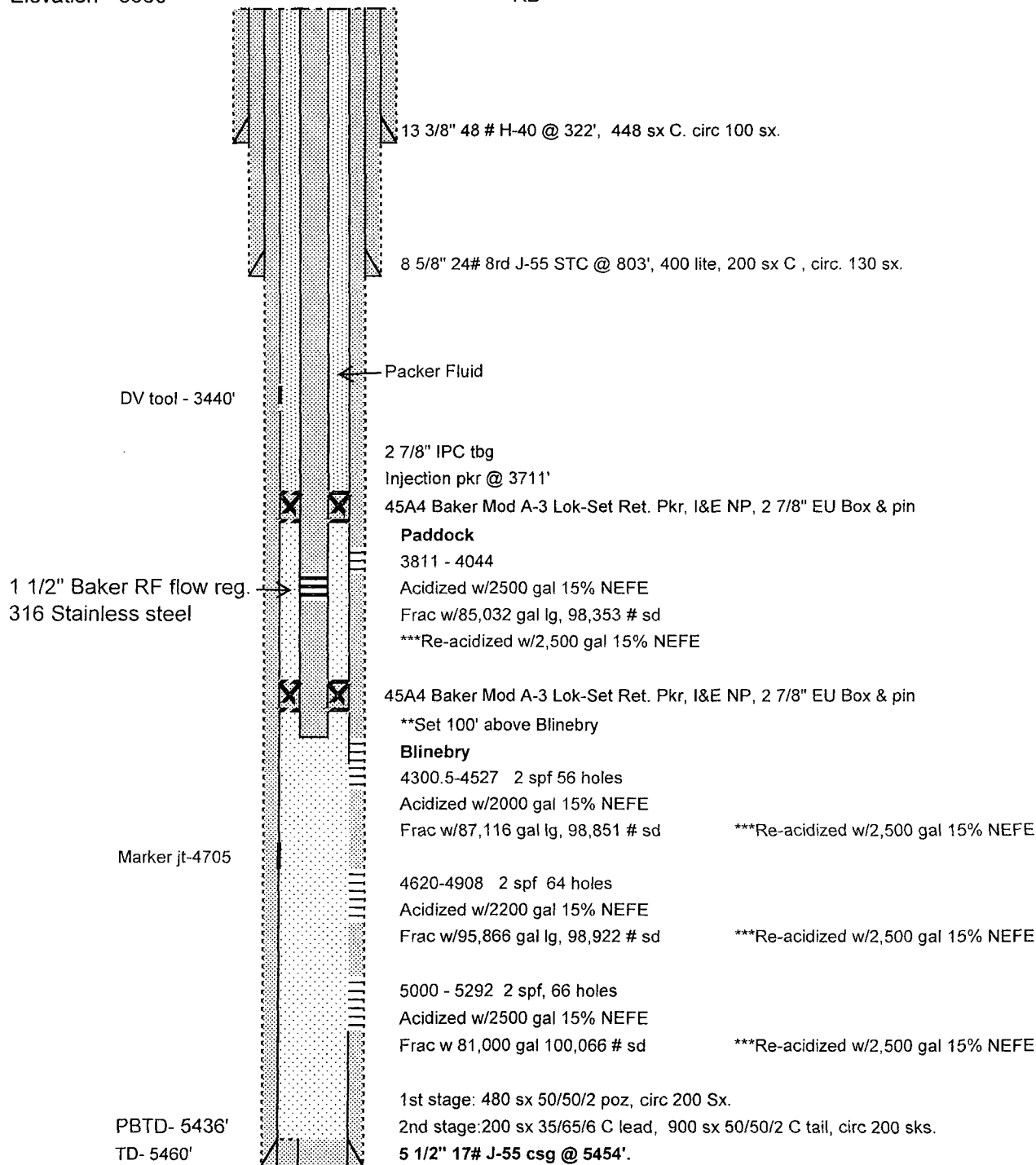


COG Operating LLC

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 330' FNL, 583' FWL
 Eddy County, NM

Elevation - 3660'

KB -



5-1/2" RETRIEVAL INJECTION SYSTEM

CUSTOMER: COG OPERATING, LLC

COUNTRY: USA FIELD: NA

QUOTATION NO. JH10010003, COWELL NO. GC FED VARIOUS

DRAWING NO. 5.5_RF_Regulators_CO2_GC Federal_Project.dwg

APPROVED BY: ERIC MCCLUSKY

DRAWN BY: JAY HARDESTY

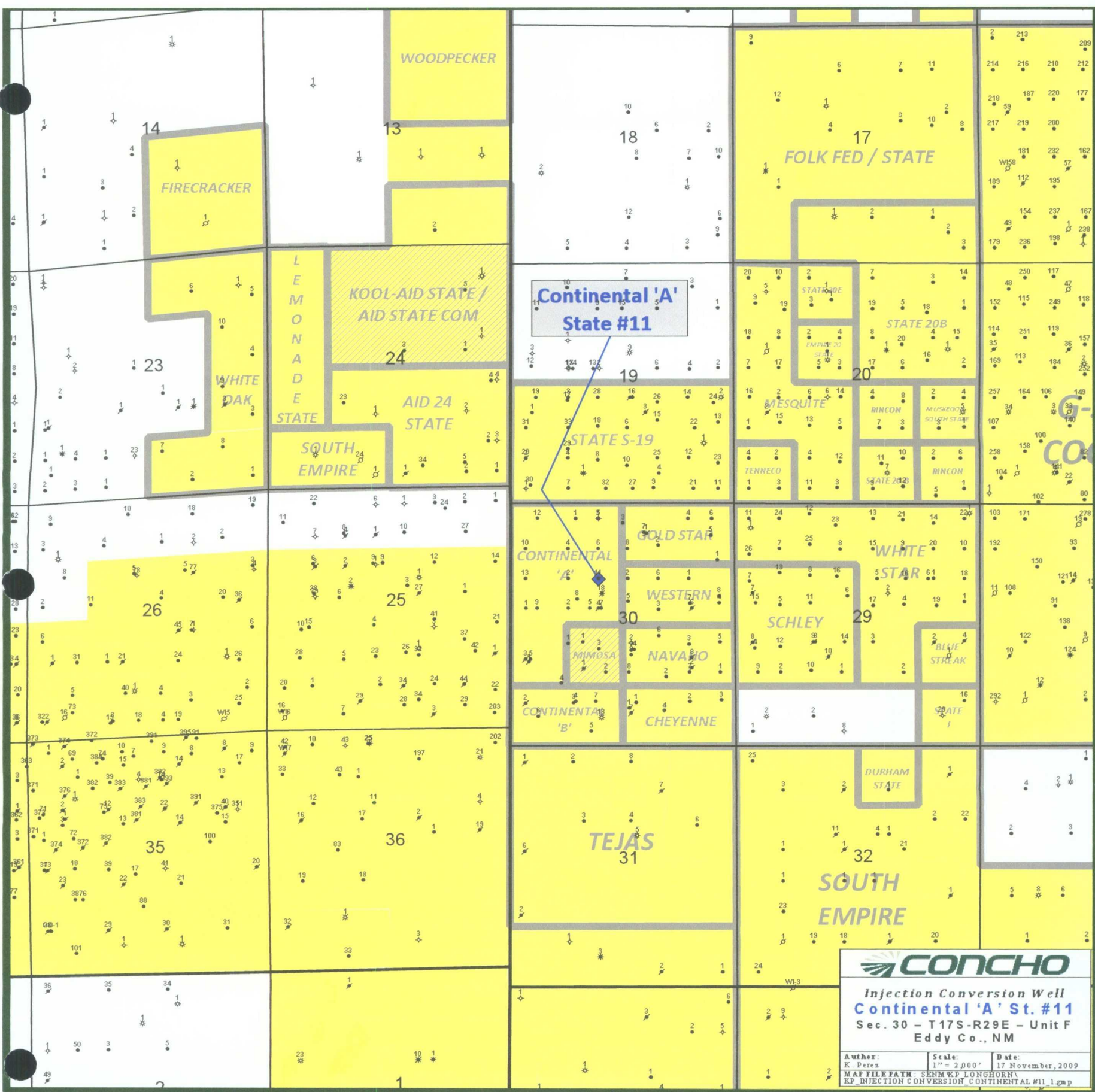
DATE: 01-07-09

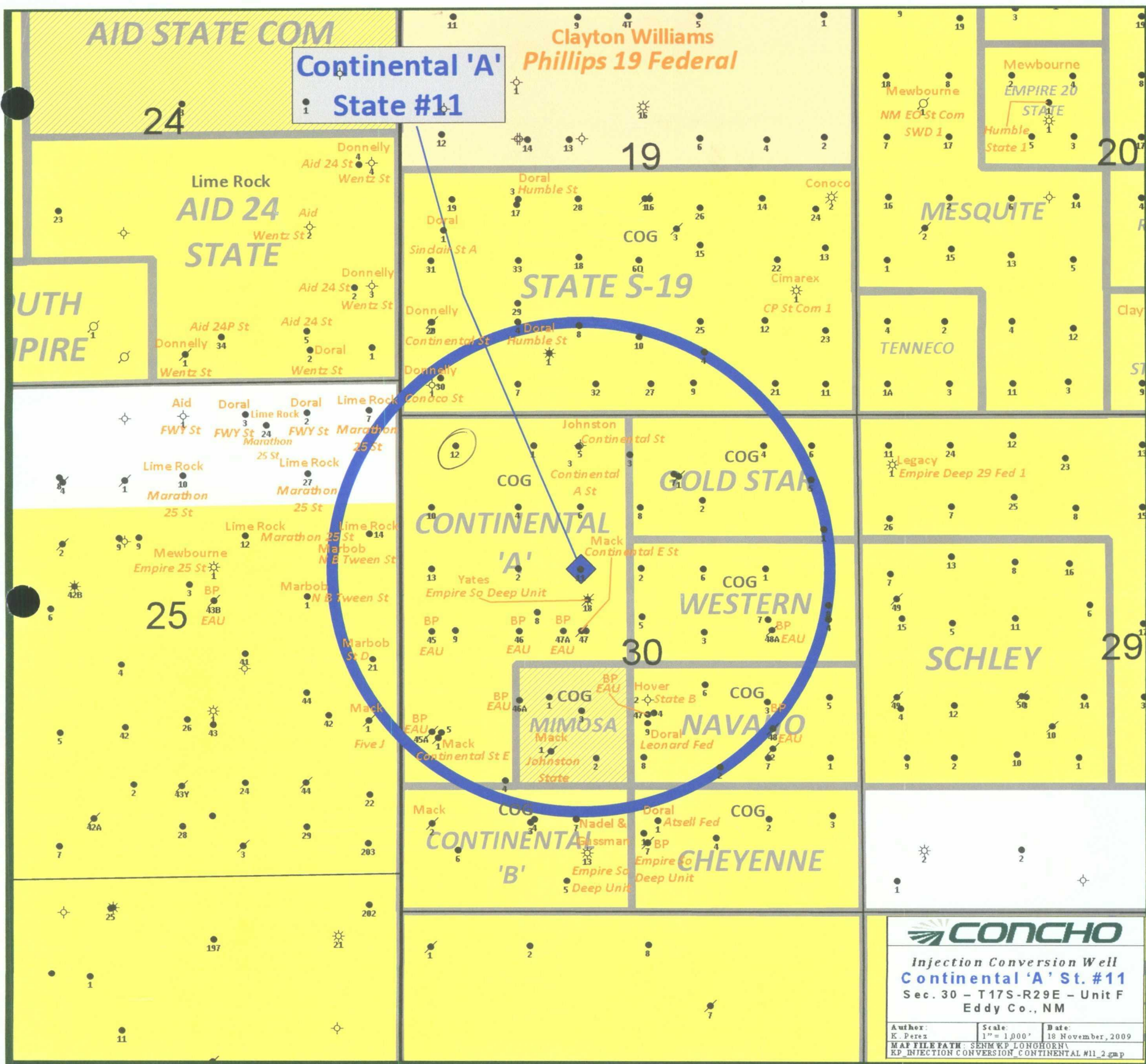


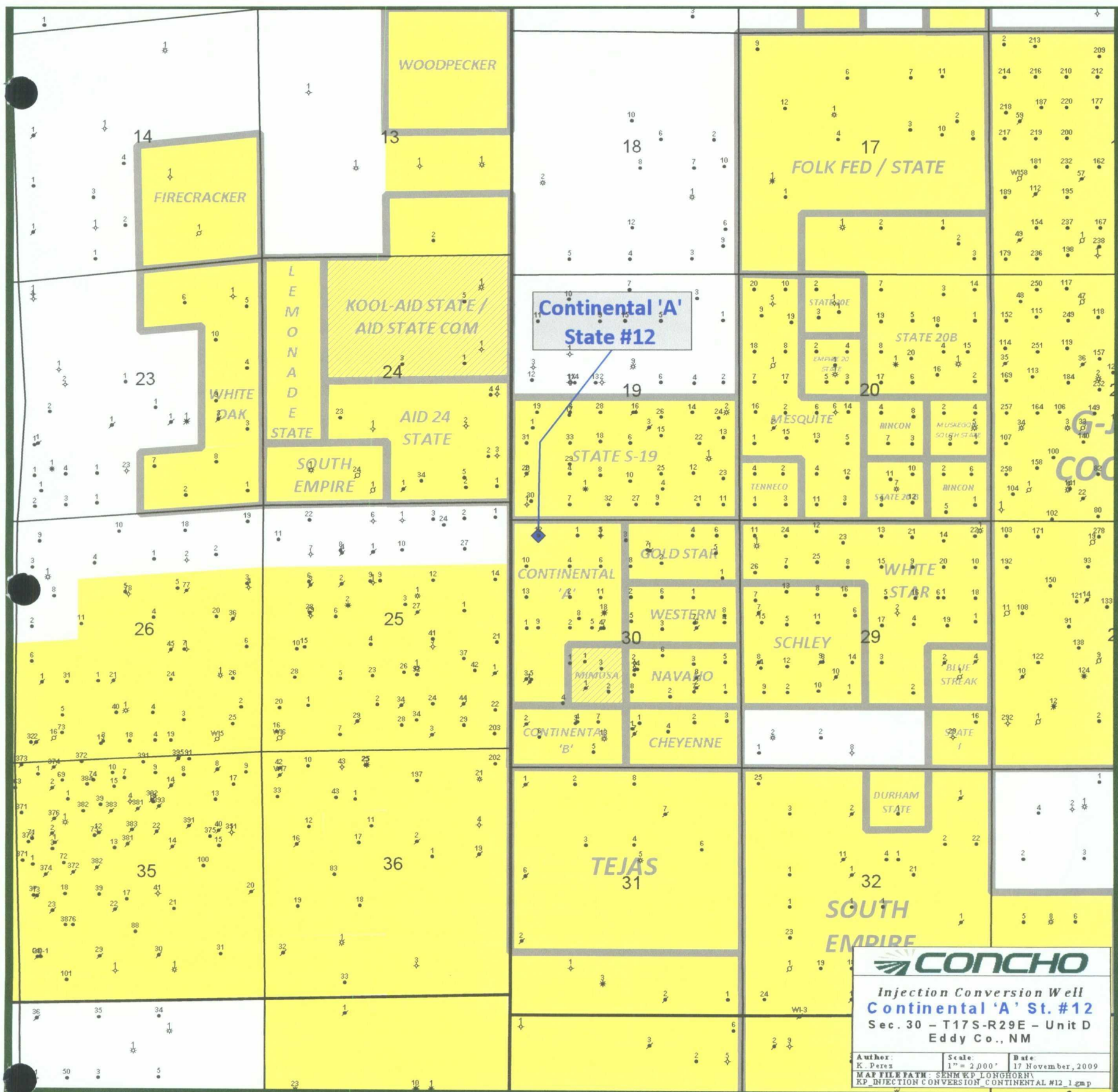
Baker Oil Tools

Not for Circulation
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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 L. TU BING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH/		
4.786"	2.000"		4 MODEL C-1 TANDEM TENSION PACKER WITH UNL OADER 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/		
4.750"	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 RK LATCH 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"	1.908"		8 MODEL A-3 LOK-SET RETRIEVABLE CASING PAC KER SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: P-110 PRODUCT FAMILYH04630/		
3.666"	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/		
4.750"	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 RK LATCH 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/		







Continental 'A'
State #12

Clayton Williams
Phillips 19 Federal

Humble St 5

Mewbourne
NM EOC St Com
SWD 1

MESQU

TENNECO

Legacy
Empire Deep 29 Fe

SCHL

CONCHO

Injection Conversion Well
Continental 'A' St. #12
Sec. 30 - T17S-R29E - Unit D
Eddy Co., NM

Author: K. Pams	Scale: 1" = 1,000'	Date: 17 November, 2009
MAP FILE NAME: SE MW RP LONGHORN RP INJECTION CONVERSION CONTINENTAL #12.gmp		

Total Wells Penetrating the Injection Interval			84																	
Total P&A'd Wells Penetrating the Injection Interval			5																	
API Number	Operator Current Name	Lease Name	Well #	Sec	Unit	Township Direction	T	Range Direction	R	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South	Footage North South
30015227430001	COG OPERATING LLC	STATE S-19	1	19	N	S	17	E	29	660	FSL	660	FSL	1571	FSL	1571	FSL	1571	FSL	10880
30015242730000	COG OPERATING LLC	STATE S-19	4	19	O	S	17	E	29	660	FSL	660	FSL	1700	FEL	1700	FEL	1700	FEL	7350
30015325020000	COG OPERATING LLC	STATE S-19	6	19	J	S	17	E	29	1650	FSL	1650	FSL	2310	FEL	2310	FEL	2310	FEL	5435
30015299650000	COG OPERATING LLC	STATE S-19	7	19	M	S	17	E	29	330	FSL	330	FSL	1242	FEL	1242	FEL	1242	FEL	4270
30015322410000	COG OPERATING LLC	STATE S-19	8	19	M	S	17	E	29	950	FSL	950	FSL	1895	FEL	1895	FEL	1895	FEL	4350
30015307280000	COG OPERATING LLC	STATE S-19	9	19	O	S	17	E	29	330	FSL	330	FSL	1750	FEL	1750	FEL	1750	FEL	4233
30015311080000	COG OPERATING LLC	STATE S-19	10	19	O	S	17	E	29	828	FSL	828	FSL	2310	FEL	2310	FEL	2310	FEL	4440
30015315030000	COG OPERATING LLC	STATE S-19	17	19	L	S	17	E	29	2250	FSL	2250	FSL	1233	FEL	1233	FEL	1233	FEL	4245
30015315040000	COG OPERATING LLC	STATE S-19	18	19	K	S	17	E	29	1680	FSL	1680	FSL	1895	FEL	1895	FEL	1895	FEL	4255
30015320590000	COG OPERATING LLC	STATE S-19	19	19	L	S	17	E	29	2310	FSL	2310	FSL	550	FEL	550	FEL	550	FEL	5305
30015320600000	COG OPERATING LLC	STATE S-19	20	19	M	S	17	E	29	990	FSL	990	FSL	330	FEL	330	FEL	330	FEL	4265
30015320620000	COG OPERATING LLC	STATE S-19	21	19	P	S	17	E	29	330	FSL	330	FSL	865	FEL	865	FEL	865	FEL	5506
30015348270000	COG OPERATING LLC	STATE S-19	25	19	O	S	17	E	29	990	FSL	990	FSL	1650	FEL	1650	FEL	1650	FEL	5460
30015348290000	COG OPERATING LLC	STATE S-19	27	19	O	S	17	E	29	330	FSL	330	FSL	2185	FEL	2185	FEL	2185	FEL	5460
30015352610000	COG OPERATING LLC	STATE S-19	29	19	L	S	17	E	29	1190	FSL	1190	FSL	1242	FEL	1242	FEL	1242	FEL	5515
30015352410000	COG OPERATING LLC	STATE S-19	30	19	M	S	17	E	29	400	FSL	400	FSL	430	FEL	430	FEL	430	FEL	5510
30015352420000	COG OPERATING LLC	STATE S-19	31	19	L	S	17	E	29	1650	FSL	1650	FSL	330	FEL	330	FEL	330	FEL	5505
30015357430000	COG OPERATING LLC	STATE S-19	32	19	N	S	17	E	29	330	FSL	330	FSL	2070	FEL	2070	FEL	2070	FEL	5421
30015359220000	COG OPERATING LLC	STATE S-19	33	19	L	S	17	E	29	1650	FSL	1650	FSL	1250	FEL	1250	FEL	1250	FEL	5419
30015030030000	DONNELLY DRUG CO	CONOCO-STATE	1	19	M	S	17	E	29	330	FSL	330	FSL	330	FEL	330	FEL	330	FEL	903
30015030040000	DONNELLY DRUG CO	CONTINENTAL-STATE	2	19	M	S	17	E	29	990	FSL	990	FSL	330	FEL	330	FEL	330	FEL	877
30015030070000	DORAL ENERGY CORPORATION	HUMBLE-STATE	3	19	L	S	17	E	29	2310	FSL	2310	FSL	1234	FEL	1234	FEL	1234	FEL	925
30015030080000	DORAL ENERGY CORPORATION	HUMBLE-STATE	4	19	M	S	17	E	29	990	FSL	990	FSL	1235	FEL	1235	FEL	1235	FEL	955
30015030050000	DORAL ENERGY CORPORATION	SINCLAIR-STATE A	1	19	L	S	17	E	29	1980	FSL	1980	FSL	452	FEL	452	FEL	452	FEL	901
30015031880000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	45	30	E	S	17	E	29	2310	FNL	2310	FNL	330	FEL	330	FEL	330	FEL	6375
30015031890000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	46	30	E	S	17	E	29	2310	FNL	2310	FNL	1254	FEL	1254	FEL	1254	FEL	6353
30015031930000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	47	30	J	S	17	E	29	2150	FSL	2150	FSL	2310	FEL	2310	FEL	2310	FEL	6379
30015031920000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	48	30	I	S	17	E	29	1980	FSL	1980	FSL	990	FEL	990	FEL	990	FEL	6360
30015031900000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	45A	30	I	S	17	E	29	1980	FSL	1980	FSL	330	FEL	330	FEL	330	FEL	6350
30015031940000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	46A	30	L	S	17	E	29	2314	FSL	2314	FSL	1256	FEL	1256	FEL	1256	FEL	6360
30015031970000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	47A	30	F	S	17	E	29	2310	FNL	2310	FNL	3210	FEL	3210	FEL	3210	FEL	6313
30015031950000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	48A	30	H	S	17	E	29	2310	FNL	2310	FNL	990	FEL	990	FEL	990	FEL	6306
30015215450000	BP AMERICA PRODUCTION COMPANY	EMPIRE S DEEP U	7	30	O	S	17	E	29	760	FSL	760	FSL	2310	FEL	2310	FEL	2310	FEL	10982
30015307090000	COG OPERATING LLC	CHEYENNE FEDERAL	1	30	O	S	17	E	29	840	FSL	840	FSL	2310	FEL	2310	FEL	2310	FEL	5400
30015296960000	COG OPERATING LLC	CONTINENTAL A STATE	1	30	C	S	17	E	29	330	FNL	330	FNL	1409	FEL	1409	FEL	1409	FEL	4260
30015296970000	COG OPERATING LLC	CONTINENTAL A STATE	2	30	E	S	17	E	29	1650	FNL	1650	FNL	1251	FEL	1251	FEL	1251	FEL	4287
30015347410000	COG OPERATING LLC	CONTINENTAL A STATE	3	30	C	S	17	E	29	505	FNL	505	FNL	1902	FEL	1902	FEL	1902	FEL	5425
30015346900000	COG OPERATING LLC	CONTINENTAL A STATE	4	30	D	S	17	E	29	990	FNL	990	FNL	1242	FEL	1242	FEL	1242	FEL	5415
30015306130000	COG OPERATING LLC	CONTINENTAL A STATE	5	30	L	S	17	E	29	1927	FSL	1927	FSL	435	FEL	435	FEL	435	FEL	4422
30015306100000	COG OPERATING LLC	CONTINENTAL A STATE	6	30	C	S	17	E	29	990	FNL	990	FNL	1907	FEL	1907	FEL	1907	FEL	4220

API Number	Operator Current Name	Lease Name	Well #	Sec	Unit	Township Direction	T	Range Direction	R	Footage North South Line	Footage East West Line	Footage East West Start Line	Depth Total Driller
30015315070000	COG OPERATING LLC	CONTINENTAL A STATE	7	30	F	S	17	E	29	2314	FNL	1968	FWL 4335
30015316190000	COG OPERATING LLC	CONTINENTAL A STATE	8	30	F	S	17	E	29	2110	FNL	1449	FWL 4360
30015323020000	COG OPERATING LLC	CONTINENTAL A STATE	9	30	E	S	17	E	29	2310	FNL	580	FWL 4376
30015324120001	COG OPERATING LLC	CONTINENTAL A STATE	10	30	D	S	17	E	29	990	FNL	330	FWL 5435
30015347420000	COG OPERATING LLC	CONTINENTAL A STATE	11	30	F	S	17	E	29	1450	FNL	1907	FWL 5757
30015350520000	COG OPERATING LLC	CONTINENTAL A STATE	12	30	D	S	17	E	29	330	FNL	583	FWL 5460
30015359460000	COG OPERATING LLC	CONTINENTAL A STATE	13	30	E	S	17	E	29	1650	FNL	330	FWL 5600
30015103190000	COG OPERATING LLC	CONTINENTAL B STATE	3	30	N	S	17	E	29	990	FSL	1375	FWL 2512
30015305170000	COG OPERATING LLC	CONTINENTAL B STATE	4	30	N	S	17	E	29	990	FSL	1420	FWL 4515
30015352390000	COG OPERATING LLC	CONTINENTAL B STATE	7	30	O	S	17	E	29	990	FSL	1856	FWL 5720
30015303580000	COG OPERATING LLC	GOLD STAR FEDERAL	1	30	H	S	17	E	29	1235	FNL	370	FEL 5125
30015303080000	COG OPERATING LLC	GOLD STAR FEDERAL	2	30	B	S	17	E	29	920	FNL	1650	FEL 4375
30015304690000	COG OPERATING LLC	GOLD STAR FEDERAL	3	30	B	S	17	E	29	430	FNL	2410	FEL 4255
30015303090000	COG OPERATING LLC	GOLD STAR FEDERAL	4	30	A	S	17	E	29	330	FNL	990	FEL 4309
30015317030000	COG OPERATING LLC	GOLD STAR FEDERAL	5	30	A	S	17	E	29	700	FNL	500	FEL 4426
30015322850000	COG OPERATING LLC	GOLD STAR FEDERAL	6	30	A	S	17	E	29	330	FNL	485	FEL 4275
30015356910000	COG OPERATING LLC	GOLD STAR FEDERAL	7	30	B	S	17	E	29	638	FNL	1950	FEL 6019
30015323690000	COG OPERATING LLC	GOLD STAR FEDERAL	8	30	B	S	17	E	29	990	FNL	2310	FEL 5575
30015305750000	COG OPERATING LLC	MIMOSA STATE	1	30	K	S	17	E	29	2310	FSL	1580	FWL 5333
30015306260000	COG OPERATING LLC	MIMOSA STATE	2	30	K	S	17	E	29	1650	FSL	2070	FWL 5292
30015330060000	COG OPERATING LLC	MIMOSA STATE	3	30	K	S	17	E	29	2160	FSL	1919	FWL 4405
30015346910000	COG OPERATING LLC	MIMOSA STATE	4	30	L	S	17	E	29	1403	FSL	1103	FWL 4618
30015308390000	COG OPERATING LLC	NAVAHO FEDERAL	2	30	J	S	17	E	29	1550	FSL	1500	FEL 4515
30015308400000	COG OPERATING LLC	NAVAHO FEDERAL	3	30	J	S	17	E	29	2260	FSL	990	FEL 4442
30015310940000	COG OPERATING LLC	NAVAHO FEDERAL	4	30	J	S	17	E	29	2141	FSL	2188	FEL 4549
30015323700000	COG OPERATING LLC	NAVAHO FEDERAL	5	30	J	S	17	E	29	2310	FSL	330	FEL 4446
30015323780000	COG OPERATING LLC	NAVAHO FEDERAL	6	30	J	S	17	E	29	2445	FSL	1650	FEL 4420
30015347710000	COG OPERATING LLC	NAVAHO FEDERAL	7	30	I	S	17	E	29	1650	FSL	990	FEL 5415
30015350140000	COG OPERATING LLC	NAVAHO FEDERAL	8	30	J	S	17	E	29	1650	FSL	2308	FEL 6060
30015300320000	COG OPERATING LLC	WESTERN FEDERAL	1	30	H	S	17	E	29	1650	FNL	990	FEL 5671
30015303100000	COG OPERATING LLC	WESTERN FEDERAL	2	30	G	S	17	E	29	1650	FNL	2310	FEL 5170
30015303570000	COG OPERATING LLC	WESTERN FEDERAL	3	30	G	S	17	E	29	2330	FNL	1650	FEL 5200
30015303110000	COG OPERATING LLC	WESTERN FEDERAL	4	30	H	S	17	E	29	2190	FNL	330	FEL 4988
30015317770000	COG OPERATING LLC	WESTERN FEDERAL	5	30	G	S	17	E	29	2160	FNL	2310	FEL 5669
30015317060000	COG OPERATING LLC	WESTERN FEDERAL	6	30	G	S	17	E	29	1650	FNL	1650	FEL 5806
30015345100000	COG OPERATING LLC	WESTERN FEDERAL	7	30	H	S	17	E	29	2210	FNL	990	FEL 5923
30015348150000	COG OPERATING LLC	WESTERN FEDERAL	8	30	H	S	17	E	29	2040	FNL	330	FEL 5775
30015104840000	DORAL ENERGY CORPORATION	ATSELL-FEDERAL	1	30	I	S	17	E	29	990	FSL	2200	FEL 2528
30015031910001	DORAL ENERGY CORPORATION	LEONARD FEDERAL	9	30	J	S	17	E	29	2050	FSL	2310	FEL 2699
30015037490000	HOVER A H	STATE B	2	30	J	S	17	E	29	2310	FSL	2310	FEL 553
30015106150000	JOHNSTON HUGH L SR	CONTINENTAL-STATE	5	30	C	S	17	E	29	330	FNL	1902	FWL 980
30015105410000	MACK ENERGY	ATSELL-FEDERAL	2	30	I	S	17	E	29	1760	FSL	990	FEL 2476
30015103180000	MACK ENERGY	CONTINENTAL B STATE	2	30	M	S	17	E	29	990	FSL	330	FWL 2486
30015103170000	MACK ENERGY	CONTINENTAL E STATE	1	30	L	S	17	E	29	1914	FSL	401	FWL 2501

API Number	Operator Current Name	Lease Name	Well #	Sec	Unit	Township Direction	T	Range Direction	R	Footage North South	Footage North Start Line	Footage North South Line	Footage East West Start Line	Footage East West Line	Depth Total	Driller
30015105420000	MACK ENERGY	CONTINENTAL E STATE	4	30	F	S	17	E	29	2310	FNL	1911	FNL	1911	FWL	2401
30015253650000	MACK ENERGY	EAGLE FEDERAL	1	30	B	S	17	E	29	660	FNL	1980	FNL	1980	FEL	3650
30015105480000	MACK ENERGY	JOHNSTON-STATE	1	30	J	S	17	E	29	1760	FSL	1592	FSL	1592	FWL	2462
30015220000000	NADEL AND GUSSMAN	EMPIRE S DEEP UNIT	13	30	N	S	17	E	29	660	FSL	1980	FSL	1980	FWL	11060
30015224000000	YATES HARVEY CO INC	EMPIRE S DEEP U	18	30	F	S	17	E	29	1980	FNL	1980	FNL	1980	FWL	11010
30015015220000	AID HERBERT	WENTZ-STATE	2	24	J	S	17	E	28	1650	FSL	990	FSL	990	FEL	900
30015362470000	LIME ROCK RES A LP	AID 24 STATE	2	24	P	S	17	E	28	990	FSL	480	FEL	480	FEL	5300
30015362490000	LIME ROCK RES A LP	AID 24 STATE	4	24	I	S	17	E	28	2310	FSL	430	FEL	430	FEL	5300
30015362460000	LIME ROCK RES A LP	AID 24 STATE	5	24	P	S	17	E	28	530	FSL	990	FEL	990	FEL	5300
30015015210000	DONNELLY DRUG CO	WENTZ-STATE	1	24	O	S	17	E	28	330	FSL	2310	FEL	2310	FEL	2840
30015015250000	DONNELLY DRUG CO	WENTZ-STATE	3	24	P	S	17	E	28	990	FSL	330	FEL	330	FEL	942
30015216160000	DONNELLY DRUG CO	WENTZ-STATE	4	24	I	S	17	E	28	2310	FSL	330	FEL	330	FEL	920
30015015230000	DORAL ENERGY CORPORATION	WENTZ-STATE	1	24	P	S	17	E	28	330	FSL	330	FEL	330	FEL	878
30015015240000	DORAL ENERGY CORPORATION	WENTZ-STATE	2	24	P	S	17	E	28	330	FSL	990	FEL	990	FEL	870
30015315490000	LIME ROCK RES A LP	AID '24P' STATE	34	24	O	S	17	E	28	480	FSL	1900	FEL	1900	FEL	4265
30015015260000	AID HERBERT	FWY-STATE	1	25	B	S	17	E	28	330	FNL	2310	FEL	2310	FEL	910
30015015400000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	43B	25	G	S	17	E	28	2310	FNL	1980	FEL	1980	FEL	7950
30015015270000	DORAL ENERGY CORPORATION	FWY-STATE	2	25	A	S	17	E	28	330	FNL	990	FEL	990	FEL	864
30015015310000	DORAL ENERGY CORPORATION	FWY-STATE	3	25	B	S	17	E	28	330	FNL	1650	FEL	1650	FEL	2222
30015245220000	LIME ROCK RES A LP	MARATHON 25 STATE	7	25	A	S	17	E	28	330	FNL	330	FEL	330	FEL	7400
30015304980000	LIME ROCK RES A LP	MARATHON 25 STATE	10	25	B	S	17	E	28	990	FNL	2310	FEL	2310	FEL	3450
30015345850000	LIME ROCK RES A LP	MARATHON 25 STATE	24	25	G	S	17	E	28	480	FNL	1650	FEL	1650	FEL	3148
30015364220000	LIME ROCK RES A LP	MARATHON 25 STATE	27	25	A	S	17	E	28	990	FNL	990	FEL	990	FEL	3500
30015306820001	LIME ROCK RES A LP	MARATHON A 25 STATE	12	25	G	S	17	E	28	1650	FNL	1650	FEL	1650	FEL	3510
30015308250000	LIME ROCK RES A LP	MARATHON A 25 STATE	14	25	H	S	17	E	28	1650	FNL	330	FEL	330	FEL	3505
30015104800000	MACK ENERGY	FIVE J	1	25	I	S	17	E	28	1650	FSL	330	FEL	330	FEL	2385
30015359150000	MARBOB ENERGY CORP	N B TWEEN STATE	1	25	H	S	17	E	28	2310	FNL	990	FEL	990	FEL	5600
30015367960000	MARBOB ENERGY CORP	N B TWEEN STATE	8	25	G	S	17	E	28	1850	FNL	1650	FEL	1650	FEL	5600
30015367890000	MARBOB ENERGY CORP	N B TWEEN STATE	11	25	H	S	17	E	28	1810	FNL	330	FEL	330	FEL	5200
30015309750000	MARBOB ENERGY CORP	STATE 'D'	21	25	I	S	17	E	28	2310	FSL	330	FEL	330	FEL	4430
30015311400000	MEWBOURNE OIL CO	EMPIRE '25' STATE	1	25	G	S	17	E	28	1980	FNL	1980	FEL	1980	FEL	10851

[illegible]

API Number	Operator Current Name	Lease Name	Well #	Field Name	State Name	County Name	Geologic Province Name	Permit Number	Formation Producing Name	Date Spud	Date Completion	Date Aband'd
30015315070000	COG OPERATING LLC	CONTINENTAL A STATE	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	12/20/2000	1/19/2001	
30015316190000	COG OPERATING LLC	CONTINENTAL A STATE	8	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	4/22/2001	5/31/2001	
30015322020000	COG OPERATING LLC	CONTINENTAL A STATE	9	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	5/14/2002	6/22/2002	
30015324120001	COG OPERATING LLC	CONTINENTAL A STATE	10	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO			
30015347420000	COG OPERATING LLC	CONTINENTAL A STATE	11	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	8/14/2006	9/14/2006	
30015350520000	COG OPERATING LLC	CONTINENTAL A STATE	12	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	9/25/2006	11/5/2006	
30015359460000	COG OPERATING LLC	CONTINENTAL A STATE	13	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	1/12/2008	3/2/2008	
30015103190000	COG OPERATING LLC	CONTINENTAL B STATE	3	GRAYBURG	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	1/28/1965	3/4/1965	
30015305170000	COG OPERATING LLC	CONTINENTAL B STATE	4	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	7/23/2000	8/23/2000	
30015322390000	COG OPERATING LLC	CONTINENTAL B STATE	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	5/1/2007	7/13/2007	
30015303580000	COG OPERATING LLC	GOLD STAR FEDERAL	1	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	12/5/1998	1/28/1999	
30015303080000	COG OPERATING LLC	GOLD STAR FEDERAL	2	EMPIRE EAS	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	1/1/1999	2/7/1999	
30015304690000	COG OPERATING LLC	GOLD STAR FEDERAL	3	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	12/30/1999	2/8/2000	
30015303090000	COG OPERATING LLC	GOLD STAR FEDERAL	4	EMPIRE EAS	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	6/17/1999	7/14/1999	
30015317030000	COG OPERATING LLC	GOLD STAR FEDERAL	5	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	6/8/2001	7/12/2001	
30015322850000	COG OPERATING LLC	GOLD STAR FEDERAL	6	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	6/22/2002	8/2/2002	
30015356910000	COG OPERATING LLC	GOLD STAR FEDERAL	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	10/5/2007	11/20/2007	
30015322369000	COG OPERATING LLC	GOLD STAR FEDERAL	8	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	12/19/2002	1/29/2003	
30015305750000	COG OPERATING LLC	MIMOSA STATE	1	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	2/24/1999	4/6/1999	
30015306260000	COG OPERATING LLC	MIMOSA STATE	2	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	4/16/1999	5/25/1999	
30015330060000	COG OPERATING LLC	MIMOSA STATE	3	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	10/9/2003	2/2/2004	
30015346910000	COG OPERATING LLC	MIMOSA STATE	4	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	12/16/2007	1/24/2008	
30015308390000	COG OPERATING LLC	NAVAHO FEDERAL	2	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	4/19/2000	5/26/2000	
30015308400000	COG OPERATING LLC	NAVAHO FEDERAL	3	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	5/14/2000	6/29/2000	
30015310940000	COG OPERATING LLC	NAVAHO FEDERAL	4	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	6/4/2000	7/12/2000	
30015323700000	COG OPERATING LLC	NAVAHO FEDERAL	5	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	8/10/2002	9/17/2002	
30015323780000	COG OPERATING LLC	NAVAHO FEDERAL	6	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	11/15/2002	1/2/2003	
30015347710000	COG OPERATING LLC	NAVAHO FEDERAL	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	7/5/2006	9/14/2006	
30015350140000	COG OPERATING LLC	NAVAHO FEDERAL	8	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	12/20/2006	2/17/2007	
30015300320000	COG OPERATING LLC	WESTERN FEDERAL	1	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	2/27/1998	8/13/1998	
30015303100000	COG OPERATING LLC	WESTERN FEDERAL	2	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	10/12/1998	11/10/1998	
30015303570000	COG OPERATING LLC	WESTERN FEDERAL	3	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	3/19/1999	4/28/1999	
30015303110000	COG OPERATING LLC	WESTERN FEDERAL	4	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		PADDOCK	9/5/1998	11/5/1998	
30015317770000	COG OPERATING LLC	WESTERN FEDERAL	5	EMPIRE	NEW MEXICO	EDDY	PERMIAN 5/9/2001		YESO	5/23/2001	7/9/2001	
30015317060000	COG OPERATING LLC	WESTERN FEDERAL	6	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	5/11/2001	6/15/2001	
30015345100000	COG OPERATING LLC	WESTERN FEDERAL	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	1/17/2006	3/17/2006	
30015348150000	COG OPERATING LLC	WESTERN FEDERAL	8	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	1/9/2007	4/7/2007	
30015104840000	DORAL ENERGY CORPORATION	ATSELL-FEDERAL	1	GRAYBURG	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	3/7/1965	5/6/1965	
30015031910001	DORAL ENERGY CORPORATION	LEONARD FEDERAL	9	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	11/3/1992	12/1/1992	
30015037490000	HOVER A H	STATE B	2	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN			7/11/1941	8/18/1941	
30015106150000	JOHNSTON HUGH L SR	CONTINENTAL-STATE	5	AID	NEW MEXICO	EDDY	PERMIAN BASIN			9/21/1965	11/8/1965	4/19/1979
30015105410000	MACK ENERGY	ATSEL-FEDERAL	2	GRAYBURG	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	4/16/1965	6/16/1965	1/30/2002
30015103180000	MACK ENERGY	CONTINENTAL B STATE	2	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	12/29/1964	2/1/1965	1/9/2001
30015103170000	MACK ENERGY	CONTINENTAL E STATE	1	GRAYBURG	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	12/13/1964	1/24/1965	12/22/2000

API Number	Operator Current Name	Lease Name	Well #	Field Name	State Name	County Name	Geologic Province Name	Permit Number	Formation Producing Name	Date Spud	Date Completion	Date Aband'd
30015105420000	MACK ENERGY	CONTINENTAL E STATE	4	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	5/16/1965	6/21/1965	1/19/2001
30015253650000	MACK ENERGY	EAGLE FEDERAL	1	GRAYBURG	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES D	8/14/1985	9/18/1985	2/17/2003
30015105480000	MACK ENERGY	JOHNSTON-STATE	1	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	6/17/1965	7/27/1965	2/27/2001
30015220000000	NADEL AND GUSSMAN	EMPIRE S DEEP UNIT	13	EMPIRE SOL	NEW MEXICO	EDDY	PERMIAN BASIN		MORROW	1/31/1977	4/7/1977	
30015224000000	YATES HARVEY CO INC	EMPIRE S DEEP U	18	EMPIRE SOL	NEW MEXICO	EDDY	PERMIAN BASIN		MORROW	4/8/1978	6/22/1978	11/5/1988
30015015220000	AID HERBERT	WENTZ-STATE	2	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN			3/22/1942	4/4/1942	4/15/1942
30015362470000	LIME ROCK RES A LP	AID 24 STATE	2	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	3/1/2010		
30015362490000	LIME ROCK RES A LP	AID 24 STATE	4	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	2/11/2010		
30015362460000	LIME ROCK RES A LP	AID 24 STATE	5	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	11/30/2009	12/31/2009	
30015015210000	DONNELLY DRLG CO	WENTZ-STATE	1	AID	NEW MEXICO	EDDY	PERMIAN BASIN			4/13/1941	7/15/1941	1/15/2001
30015015250000	DONNELLY DRLG CO	WENTZ-STATE	3	AID	NEW MEXICO	EDDY	PERMIAN BASIN			1/14/1958	5/21/1958	8/1/1958
30015216160000	DONNELLY DRLG CO	WENTZ-STATE	4	AID	NEW MEXICO	EDDY	PERMIAN BASIN		YATES	11/12/1976	1/24/1977	1/25/1977
30015015230000	DORAL ENERGY CORPORATION	WENTZ-STATE	1	AID	NEW MEXICO	EDDY	PERMIAN BASIN		YATES	1/15/1953	2/10/1953	
30015015240000	DORAL ENERGY CORPORATION	WENTZ-STATE	2	AID	NEW MEXICO	EDDY	PERMIAN BASIN		YATES	4/3/1953	6/10/1953	
30015315490000	LIME ROCK RES A LP	AID 24P STATE	34	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	2/1/2001	3/9/2001	
30015015260000	AID HERBERT	FWY-STATE	1	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN			11/5/1941	4/22/1942	
30015015400000	BP AMERICA PRODUCTION COM	EMPIRE ABO UNIT	43B	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		ABO /SH/	7/25/1960	8/13/1960	11/20/1975
30015015270000	DORAL ENERGY CORPORATION	FWY-STATE	2	AID	NEW MEXICO	EDDY	PERMIAN BASIN		YATES	12/20/1941	2/25/1943	
30015015310000	DORAL ENERGY CORPORATION	FWY-STATE	3	AID	NEW MEXICO	EDDY	PERMIAN BASIN		YATES	1/11/1961	3/14/1961	
30015245220000	LIME ROCK RES A LP	MARATHON 25 STATE	7	EMPIRE	NEW MEXICO	EDDY	PERMIAN BASIN		ABO /SH/	7/27/1983	9/13/1984	
30015304980000	LIME ROCK RES A LP	MARATHON 25 STATE	10	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES D	5/26/1999	6/28/1999	
30015345850000	LIME ROCK RES A LP	MARATHON 25 STATE	24	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES	5/8/2006	6/27/2006	
30015364220000	LIME ROCK RES A LP	MARATHON 25 STATE	27	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES U	10/22/2008	12/16/2008	
30015306820001	LIME ROCK RES A LP	MARATHON A 25 STATE	12	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES	5/11/2004	6/20/2004	
30015308250000	LIME ROCK RES A LP	MARATHON A 25 STATE	14	RED LAKE	NEW MEXICO	EDDY	PERMIAN BASIN		SAN ANDRES	12/6/1999	2/2/2000	
30015104800000	MACK ENERGY	FIVE J	1	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		GRAYBURG	3/12/1965	4/21/1965	3/20/2001
30015359150000	MARBOB ENERGY CORP	N B TWEEN STATE	1	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	2/13/2008	4/19/2008	
30015367960000	MARBOB ENERGY CORP	N B TWEEN STATE	8	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	3/20/2009	6/13/2009	
30015367890000	MARBOB ENERGY CORP	N B TWEEN STATE	11	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	5/15/2009		
30015309750000	MARBOB ENERGY CORP	STATE 'D'	21	ARTESIA	NEW MEXICO	EDDY	PERMIAN BASIN		YESO	6/5/2000	7/3/2000	
30015311400000	MEWBOURNE OIL CO	EMPIRE 25 STATE	1	EMPIRE SOL	NEW MEXICO	EDDY	PERMIAN BASIN		MORROW	5/23/2000	7/29/2000	

Total Wells Penetrating the Injection Interval		84			
Total P&A'd Wells Penetrating the Injection Interval		5			
API Number	Operator Current Name	Lease Name	Well #	Date First Report	Date Last Activity
30015227430001	COG OPERATING LLC	STATE S-19	1	1/23/1982	8/16/2005
30015242730000	COG OPERATING LLC	STATE S-19	4	9/23/1982	8/16/2005
30015325020000	COG OPERATING LLC	STATE S-19	6	10/31/2002	8/18/2005
30015299650000	COG OPERATING LLC	STATE S-19	7	12/19/1997	8/18/2005
30015322410000	COG OPERATING LLC	STATE S-19	8	4/5/2002	8/18/2005
30015307280000	COG OPERATING LLC	STATE S-19	9	8/20/1999	8/18/2005
30015311080000	COG OPERATING LLC	STATE S-19	10	5/2/2000	8/18/2005
30015315030000	COG OPERATING LLC	STATE S-19	17	12/18/2000	8/18/2005
30015315040000	COG OPERATING LLC	STATE S-19	18	12/18/2000	8/18/2005
30015320590000	COG OPERATING LLC	STATE S-19	19	10/22/2001	1/31/2003
30015320600000	COG OPERATING LLC	STATE S-19	20	10/22/2001	8/18/2005
30015320620000	COG OPERATING LLC	STATE S-19	21	10/29/2001	8/18/2005
30015348270000	COG OPERATING LLC	STATE S-19	25	5/3/2006	2/21/2007
30015348290000	COG OPERATING LLC	STATE S-19	27	5/3/2006	1/2/2009
30015352610000	COG OPERATING LLC	STATE S-19	29	12/4/2006	8/19/2009
30015352410000	COG OPERATING LLC	STATE S-19	30	11/28/2006	8/19/2009
30015352420000	COG OPERATING LLC	STATE S-19	31	11/28/2006	8/19/2009
30015357430000	COG OPERATING LLC	STATE S-19	32	8/6/2007	9/23/2009
30015359220000	COG OPERATING LLC	STATE S-19	33	12/3/2007	9/23/2009
30015030030000	DONNELLY DRUG CO	CONOCO-STATE	1	8/1/1973	8/15/2005
30015030040000	DONNELLY DRUG CO	CONTINENTAL-STATE	2	8/1/1973	8/15/2005
30015030070000	DORAL ENERGY CORPORATION	HUMBLE-STATE	3	8/1/1973	8/15/2005
30015030080000	DORAL ENERGY CORPORATION	HUMBLE-STATE	4	8/1/1973	8/15/2005
30015030050000	DORAL ENERGY CORPORATION	SINCLAIR-STATE A	1	8/1/1973	8/15/2005
30015031880000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	45	8/1/1973	8/15/2005
30015031890000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	46	8/1/1973	8/15/2005
30015031930000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	47	8/1/1973	8/15/2005
30015031920000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	48	8/1/1973	8/15/2005
30015031900000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	45A	8/1/1973	8/15/2005
30015031940000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	46A	8/1/1973	8/15/2005
30015031970000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	47A	8/1/1973	8/15/2005
30015031950000	BP AMERICA PRODUCTION COMPANY	EMPIRE ABO UNIT	48A	8/1/1973	8/15/2005
30015215450000	BP AMERICA PRODUCTION COMPANY	EMPIRE S DEEP U	7	1/1/1976	8/16/2005
30015307090000	COG OPERATING LLC	CHEYENNE FEDERAL	1	3/16/1999	8/18/2005
30015296960000	COG OPERATING LLC	CONTINENTAL A STATE	1	6/27/1997	8/18/2005
30015296970000	COG OPERATING LLC	CONTINENTAL A STATE	2	6/27/1997	8/18/2005
30015347410000	COG OPERATING LLC	CONTINENTAL A STATE	3	3/30/2006	8/29/2007
30015346900000	COG OPERATING LLC	CONTINENTAL A STATE	4	3/16/2006	1/31/2007
30015306130000	COG OPERATING LLC	CONTINENTAL A STATE	5	4/7/1999	8/18/2005
30015306100000	COG OPERATING LLC	CONTINENTAL A STATE	6	4/7/1999	8/18/2005

API Number	Operator Current Name	Lease Name	Well #	Date First Report	Date Last Activity
30015315070000	COG OPERATING LLC	CONTINENTAL A STATE	7	12/18/2001	8/18/2005
30015316190000	COG OPERATING LLC	CONTINENTAL A STATE	8	3/2/2001	8/18/2005
30015323020000	COG OPERATING LLC	CONTINENTAL A STATE	9	5/21/2002	8/17/2009
30015324120001	COG OPERATING LLC	CONTINENTAL A STATE	10	10/2/2007	10/2/2007
30015347420000	COG OPERATING LLC	CONTINENTAL A STATE	11	3/30/2006	2/5/2008
30015350520000	COG OPERATING LLC	CONTINENTAL A STATE	12	8/4/2006	1/2/2009
30015359460000	COG OPERATING LLC	CONTINENTAL A STATE	13	12/7/2007	9/23/2009
30015103190000	COG OPERATING LLC	CONTINENTAL B STATE	3	8/1/1973	10/15/2009
30015305170000	COG OPERATING LLC	CONTINENTAL B STATE	4	12/15/1998	1/23/2007
30015323390000	COG OPERATING LLC	CONTINENTAL B STATE	7	11/28/2006	9/23/2009
30015303580000	COG OPERATING LLC	GOLD STAR FEDERAL	1	5/15/1998	8/18/2005
30015303080000	COG OPERATING LLC	GOLD STAR FEDERAL	2	5/15/1998	8/18/2005
30015304690000	COG OPERATING LLC	GOLD STAR FEDERAL	3	5/15/1998	8/18/2005
30015303090000	COG OPERATING LLC	GOLD STAR FEDERAL	4	6/22/1999	8/18/2005
30015317030000	COG OPERATING LLC	GOLD STAR FEDERAL	5	3/8/2001	8/27/2007
30015322850000	COG OPERATING LLC	GOLD STAR FEDERAL	6	4/18/2002	8/18/2005
30015356910000	COG OPERATING LLC	GOLD STAR FEDERAL	7	5/24/2007	8/19/2009
30015323690000	COG OPERATING LLC	GOLD STAR FEDERAL	8	7/19/2002	8/18/2005
30015305750000	COG OPERATING LLC	MIMOSA STATE	1	2/19/1999	8/18/2005
30015306260000	COG OPERATING LLC	MIMOSA STATE	2	4/16/1999	8/18/2005
30015330060000	COG OPERATING LLC	MIMOSA STATE	3	9/22/2003	8/25/2006
30015346910000	COG OPERATING LLC	MIMOSA STATE	4	3/16/2006	9/23/2009
30015308390000	COG OPERATING LLC	NAVAHO FEDERAL	2	10/1/1999	8/18/2005
30015308400000	COG OPERATING LLC	NAVAHO FEDERAL	3	10/1/1999	8/18/2005
30015310940000	COG OPERATING LLC	NAVAHO FEDERAL	4	3/21/2000	8/18/2005
30015323700000	COG OPERATING LLC	NAVAHO FEDERAL	5	7/19/2002	8/18/2005
30015323780000	COG OPERATING LLC	NAVAHO FEDERAL	6	7/18/2002	8/18/2005
30015347710000	COG OPERATING LLC	NAVAHO FEDERAL	7	2/27/2006	12/19/2007
30015350140000	COG OPERATING LLC	NAVAHO FEDERAL	8	6/1/2006	1/2/2009
30015300320000	COG OPERATING LLC	WESTERN FEDERAL	1	12/16/1997	8/18/2005
30015303100000	COG OPERATING LLC	WESTERN FEDERAL	2	5/20/1998	8/18/2005
30015303570000	COG OPERATING LLC	WESTERN FEDERAL	3	5/20/1998	8/18/2005
30015303110000	COG OPERATING LLC	WESTERN FEDERAL	4	5/20/1998	8/18/2005
30015317770000	COG OPERATING LLC	WESTERN FEDERAL	5	2/27/2001	8/18/2005
30015317060000	COG OPERATING LLC	WESTERN FEDERAL	6	4/17/2001	8/18/2005
30015345100000	COG OPERATING LLC	WESTERN FEDERAL	7	10/27/2005	1/23/2007
30015348150000	COG OPERATING LLC	WESTERN FEDERAL	8	2/28/2006	7/6/2009
30015104840000	DORAL ENERGY CORPORATION	ATSELL-FEDERAL	1	8/1/1973	10/15/2009
30015031910001	DORAL ENERGY CORPORATION	LEONARD FEDERAL	9	3/3/1993	8/15/2005
30015037490000	HOVER A H	STATE B	2	8/1/1973	8/15/2005
30015106150000	JOHNSTON HUGH L SR	CONTINENTAL-STATE	5	8/1/1973	8/16/2006
30015105410000	MACK ENERGY	ATSEL-FEDERAL	2	8/1/1973	10/15/2009
30015103180000	MACK ENERGY	CONTINENTAL B STATE	2	8/1/1973	10/15/2009
30015103170000	MACK ENERGY	CONTINENTAL E STATE	1	8/1/1973	10/15/2009

API Number	Operator Current Name	Lease Name	Well #	Date First Report	Date Last Activity
30015105420000	MACK ENERGY	CONTINENTAL E STATE	4	8/1/1973	10/15/2009
30015253650000	MACK ENERGY	EAGLE FEDERAL	1	8/14/1985	8/16/2005
30015105480000	MACK ENERGY	JOHNSTON-STATE	1	8/1/1973	10/15/2009
30015220000000	NADEL AND GUSSMAN	EMPIRE S DEEP UNIT	13	7/1/1977	8/16/2005
30015224000000	YATES HARVEY CO INC	EMPIRE S DEEP U	18	8/1/1978	8/16/2005
30015015220000	AID HERBERT	WENTZ-STATE	2	8/1/1973	8/15/2005
30015362470000	LIME ROCK RES A LP	AID 24 STATE	2		
30015362490000	LIME ROCK RES A LP	AID 24 STATE	4		
30015362460000	LIME ROCK RES A LP	AID 24 STATE	5	4/8/2008	1/10/2010
30015015210000	DONNELLY DRLG CO	WENTZ-STATE	1	8/1/1973	8/15/2005
30015015250000	DONNELLY DRLG CO	WENTZ-STATE	3	8/1/1973	8/15/2005
30015216160000	DONNELLY DRLG CO	WENTZ-STATE	4	4/1/1977	8/16/2005
30015015230000	DORAL ENERGY CORPORATION	WENTZ-STATE	1	8/1/1973	8/15/2005
30015015240000	DORAL ENERGY CORPORATION	WENTZ-STATE	2	8/1/1973	8/15/2005
30015315490000	LIME ROCK RES A LP	AID '24P' STATE	34	1/23/2001	8/18/2005
30015015260000	AID HERBERT	FWY-STATE	1	8/1/1973	8/15/2005
30015015400000	BP AMERICA PRODUCTION COM	EMPIRE ABO UNIT	43B	8/1/1973	1/23/2008
30015015270000	DORAL ENERGY CORPORATION	FWY-STATE	2	8/1/1973	8/15/2005
30015015310000	DORAL ENERGY CORPORATION	FWY-STATE	3	8/1/1973	8/15/2005
30015245220000	LIME ROCK RES A LP	MARATHON 25 STATE	7	7/13/1983	8/16/2005
30015304980000	LIME ROCK RES A LP	MARATHON 25 STATE	10	11/13/1998	4/22/2009
30015345850000	LIME ROCK RES A LP	MARATHON 25 STATE	24	2/10/2006	1/31/2007
30015364220000	LIME ROCK RES A LP	MARATHON 25 STATE	27	7/23/2008	9/23/2009
30015306820001	LIME ROCK RES A LP	MARATHON A 25 STATE	12	12/20/2004	10/13/2009
30015308250000	LIME ROCK RES A LP	MARATHON A 25 STATE	14	11/15/1999	8/18/2005
30015104800000	MACK ENERGY	FIVE J	1	8/1/1973	10/15/2009
30015359150000	MARBOB ENERGY CORP	N B TWEEN STATE	1	11/12/2007	9/23/2009
30015367960000	MARBOB ENERGY CORP	N B TWEEN STATE	8	12/12/2008	12/7/2009
30015367890000	MARBOB ENERGY CORP	N B TWEEN STATE	11	12/12/2008	9/23/2009
30015309750000	MARBOB ENERGY CORP	STATE 'D'	21	2/24/2000	8/18/2005
30015311400000	MEWBOURNE OIL CO	EMPIRE '25' STATE	1	5/11/2000	8/18/2005

COG Operating LLC

Lease & Well #
API # 30-015-22743

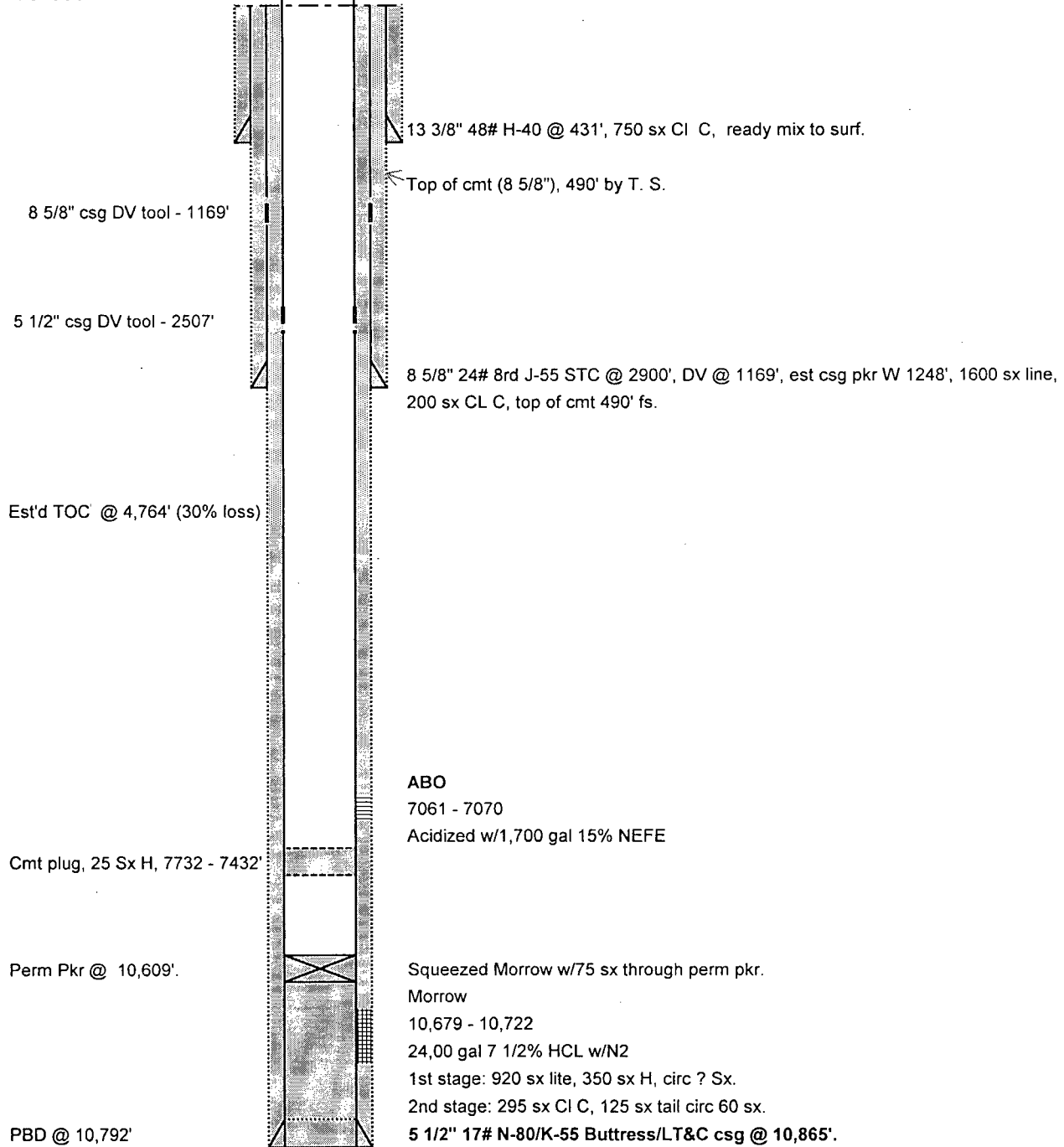
State S-19 # 1

Active
N / Sec 19 N T 17S R 29 E
Eddy Co., NM

SPUD- 12/29/78

Elevation - 3646'

KB -



4/28/2010

State S-19 # 1 Wellbore diagram1

SHodges

COG Operating LLC

Lease & Well #
API # 30-015-24273

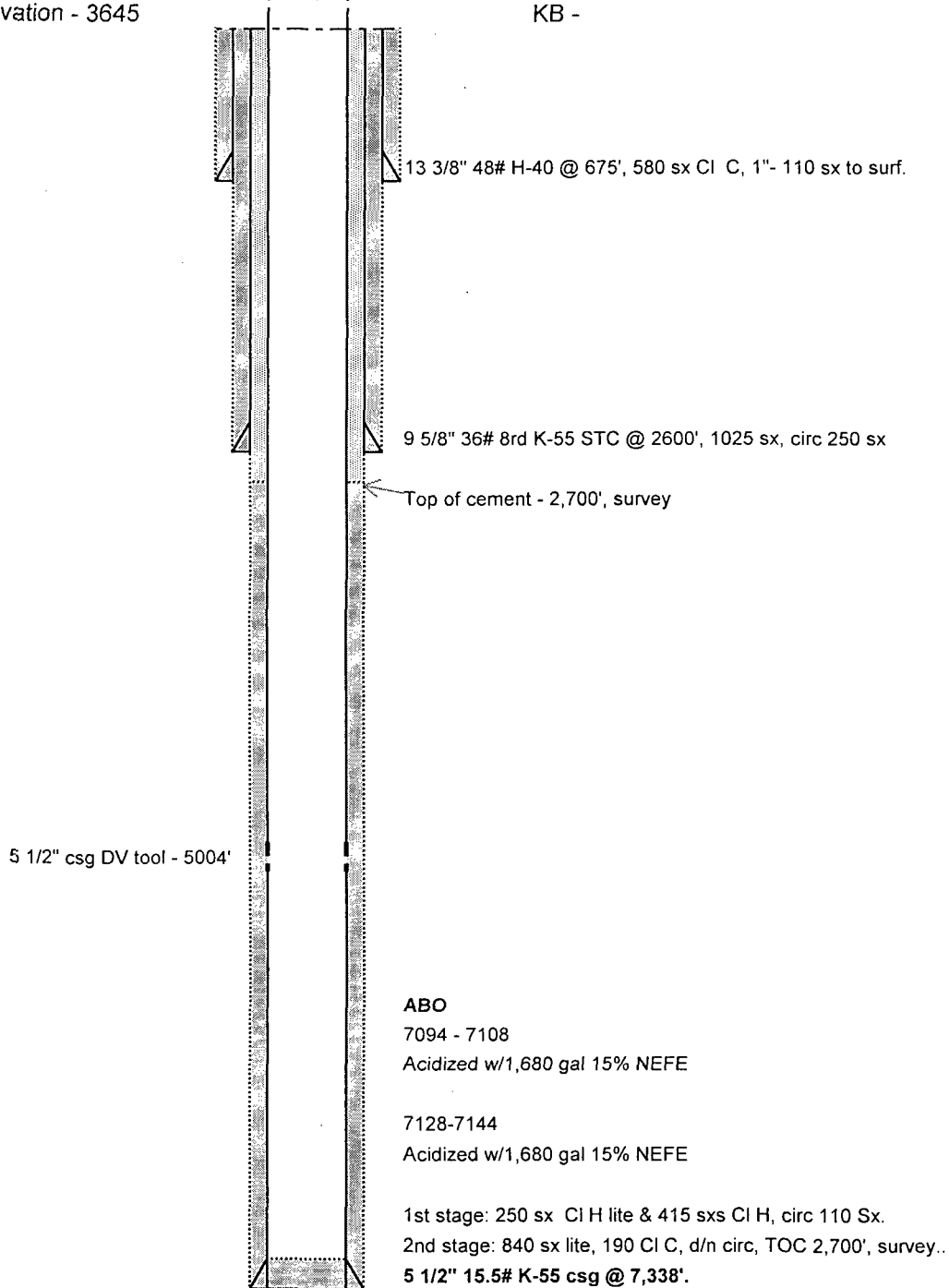
State S-19 # 4

Sec 19O T 17S R 29E
Eddy Co., NM

SPUD- 11/20/02

Elevation - 3645

KB -



4/28/2010

State S-19 # 4 Wellbore diagram

SHodges

COG Operating LLC

Lease & Well # State S -19 #6

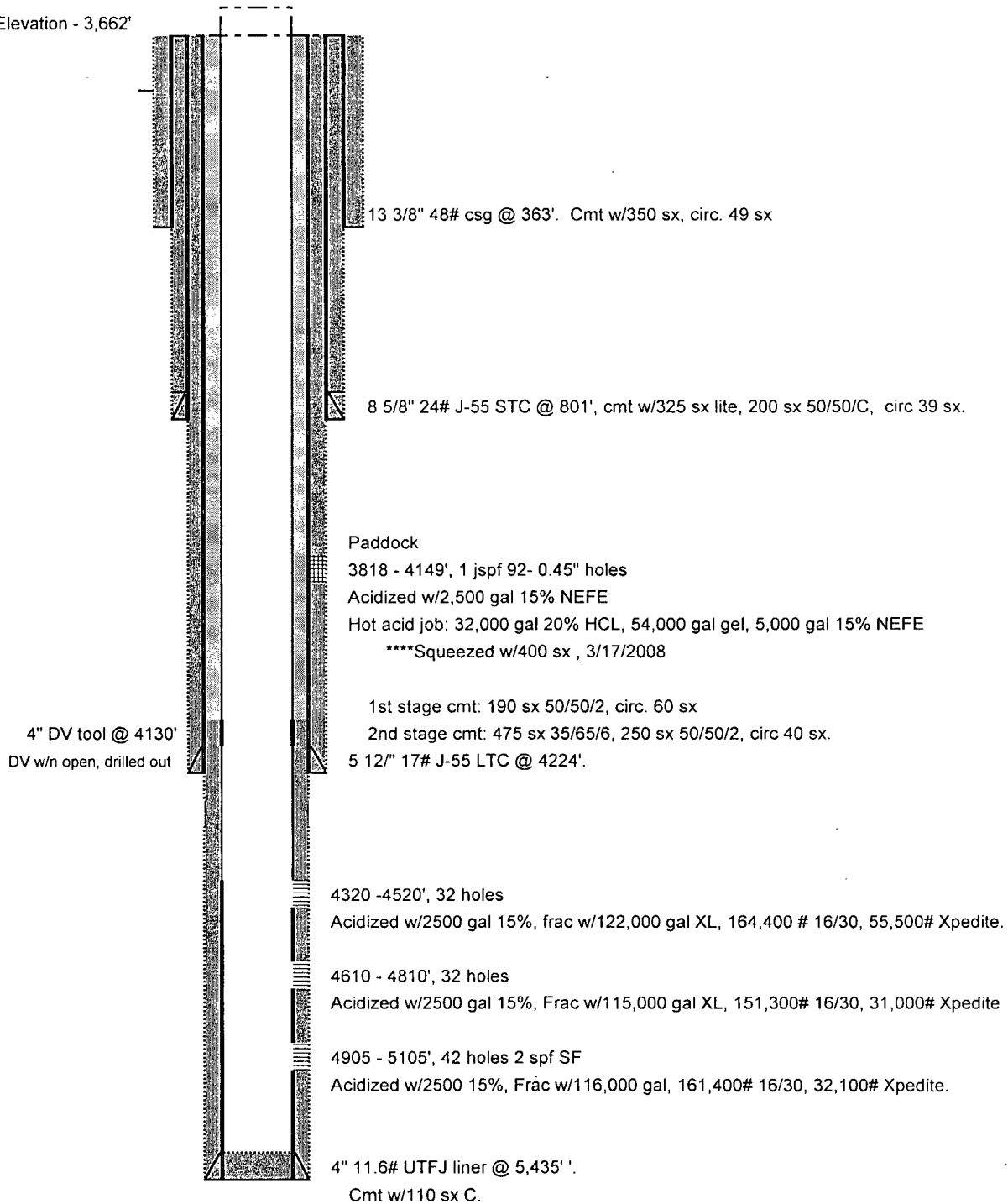
30 015 32502

Eddy County, NM

Sec 19 T17S R29E 1650 FSL 2310 FEL

Spud: 12/3/2002

Elevation - 3,662'



4/28/2010

State s-19_6_ Wellbore diagram

SH

COG OPERATING LLC

ACTIVE

Lease & Well # State S 19 #6Q

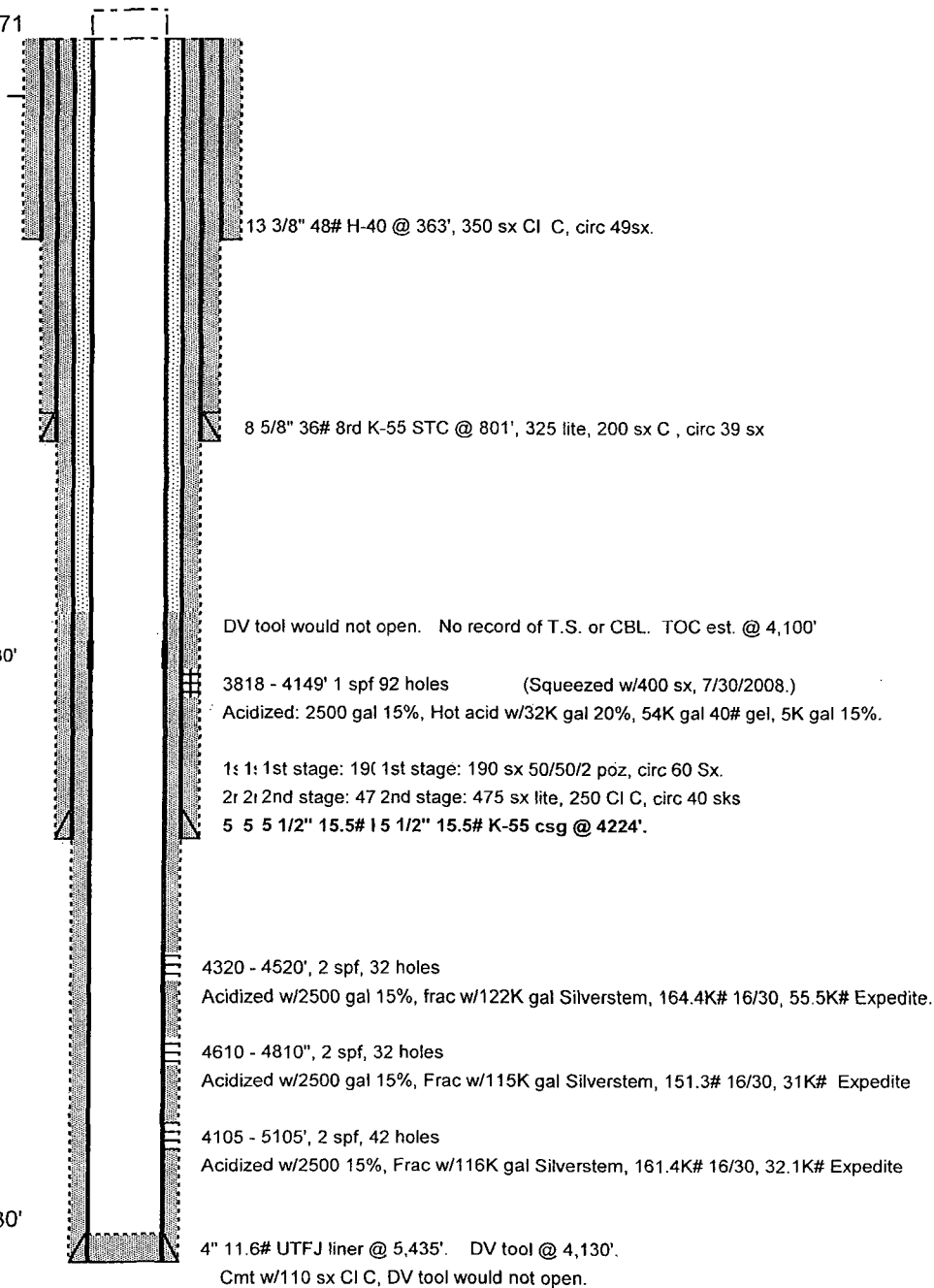
30-015-31787

Eddy County, NM

Sec 19 T17S R29E 1650 FSL 2310 FEL

SPUD- 12/3/02

Elevation - 3671



COG OPERATING LLC

Lease & Well #
API# 30-015-29965

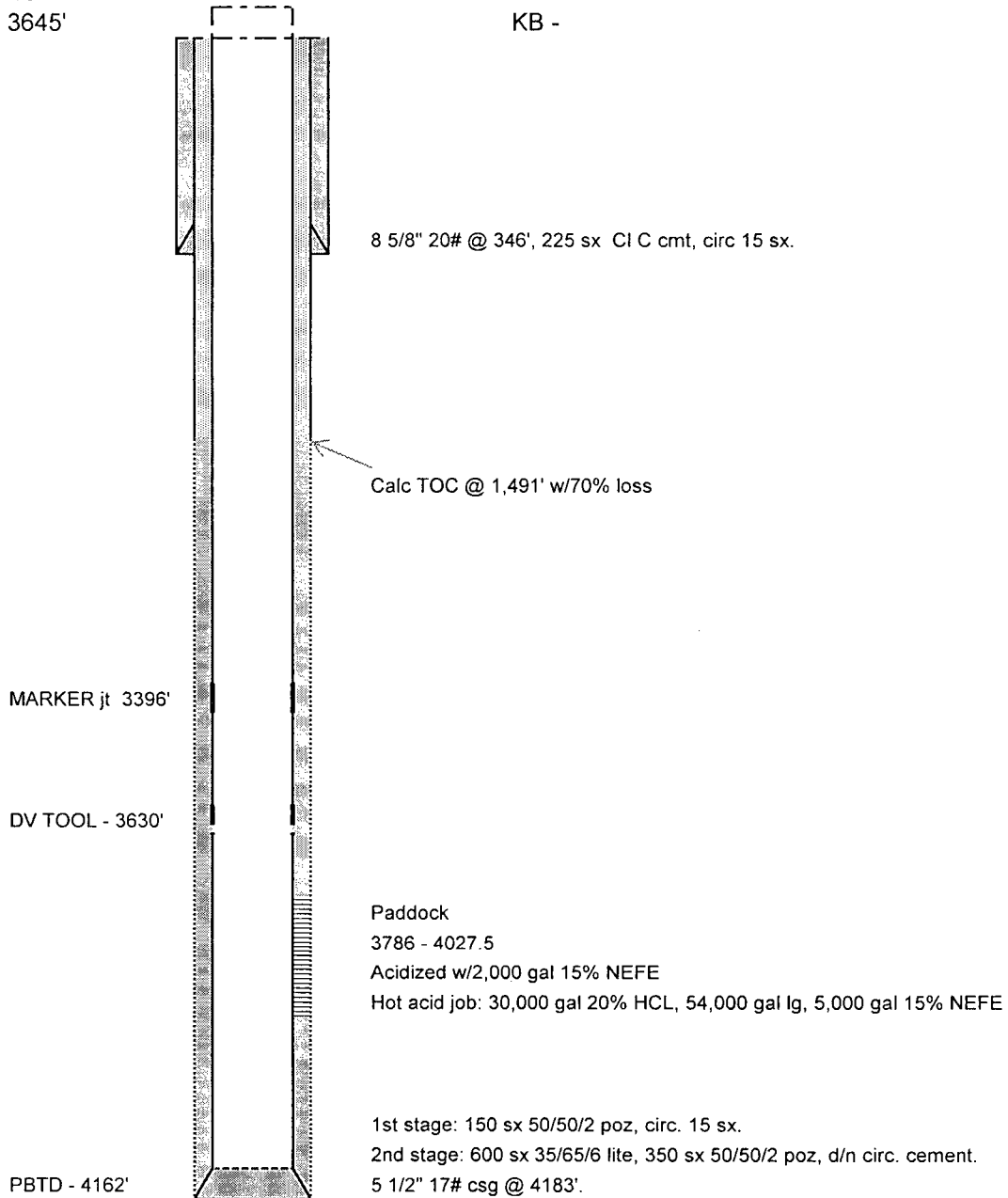
State S-19 #7
N-19-17S-29E

ACTIVE

Eddy Co., NM

Spud: 12/17/97
Elevation - 3645'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-32241

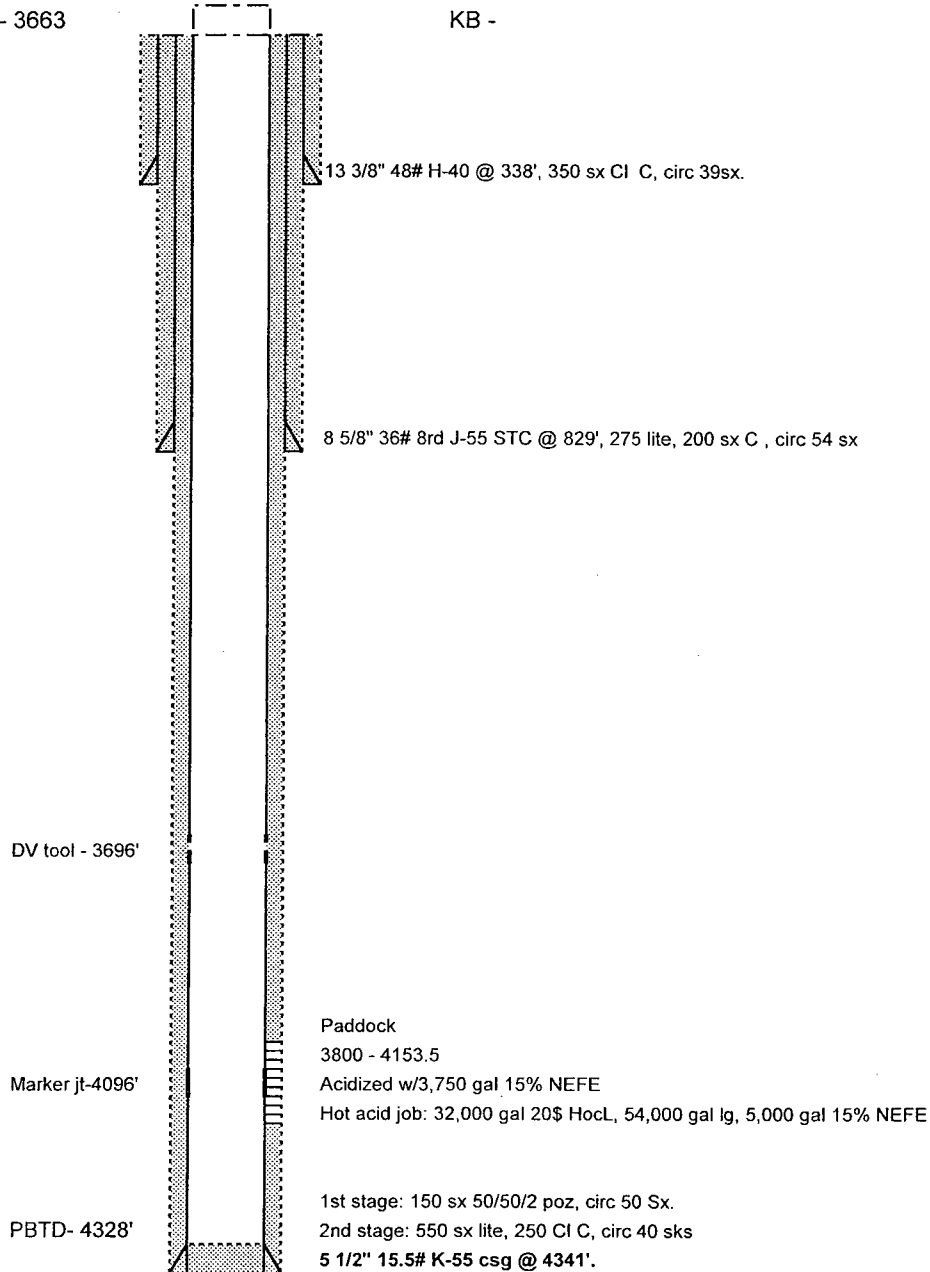
State S-19 # 8
N-19-17S-29E

ACTIVE
Eddy Co., NM

SPUD- 6/10/02

Elevation - 3663

KB -



1/29/2010

State S-19 # 8 Wellbore diagram.xls

SHodges

COG Operating LLC

Lease & Well #
API# 30-015-30728

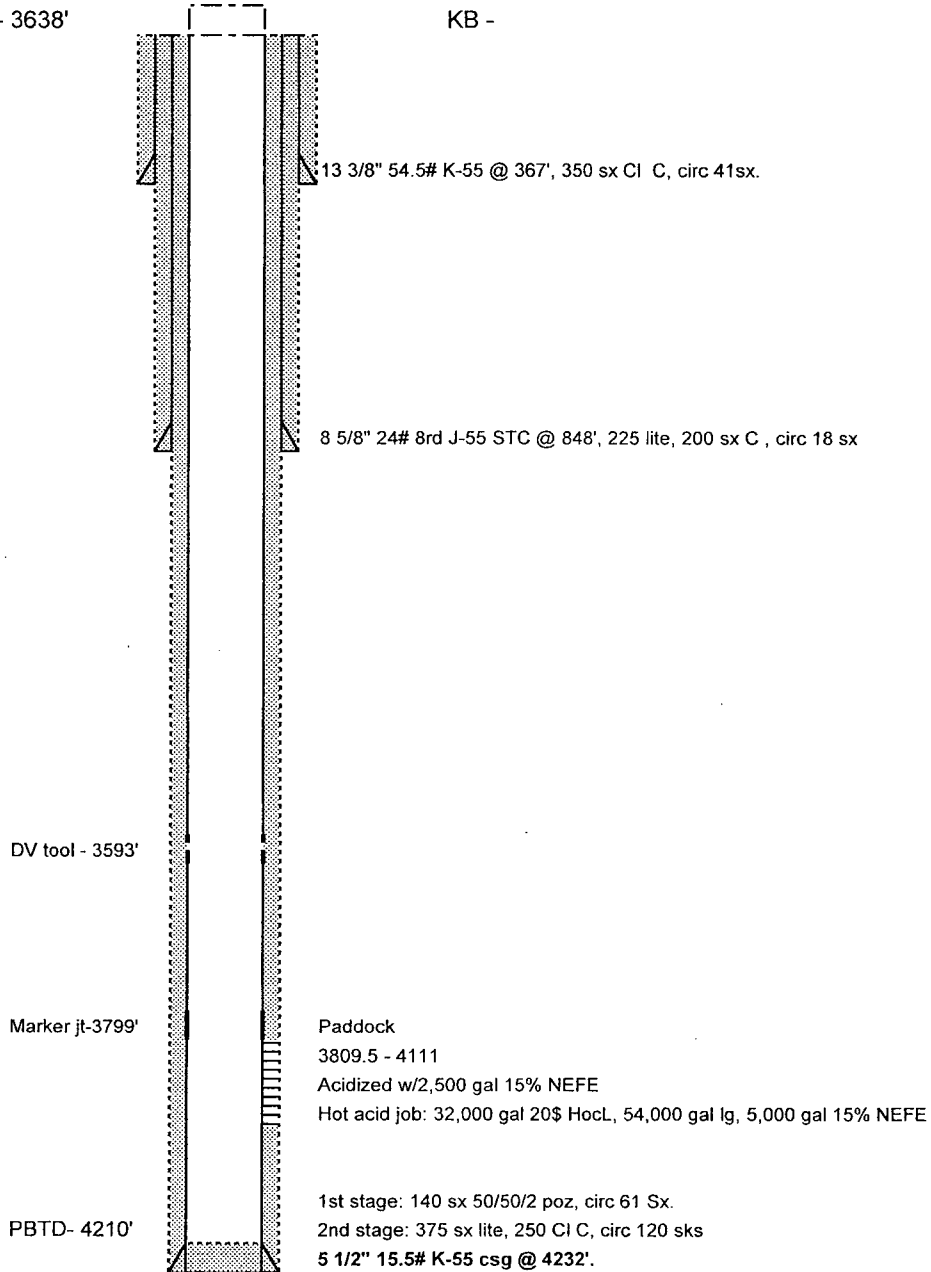
State S-19 # 9
O-19-17S-29E

ACTIVE
Eddy Co., NM

SPUD- 10/20/99

Elevation - 3638'

KB -



1/29/2010

State S-19 # 9 Wellbore diagram.xls

SHodges

COG Operating LLC

Lease & Well #
API# 30-015-31108

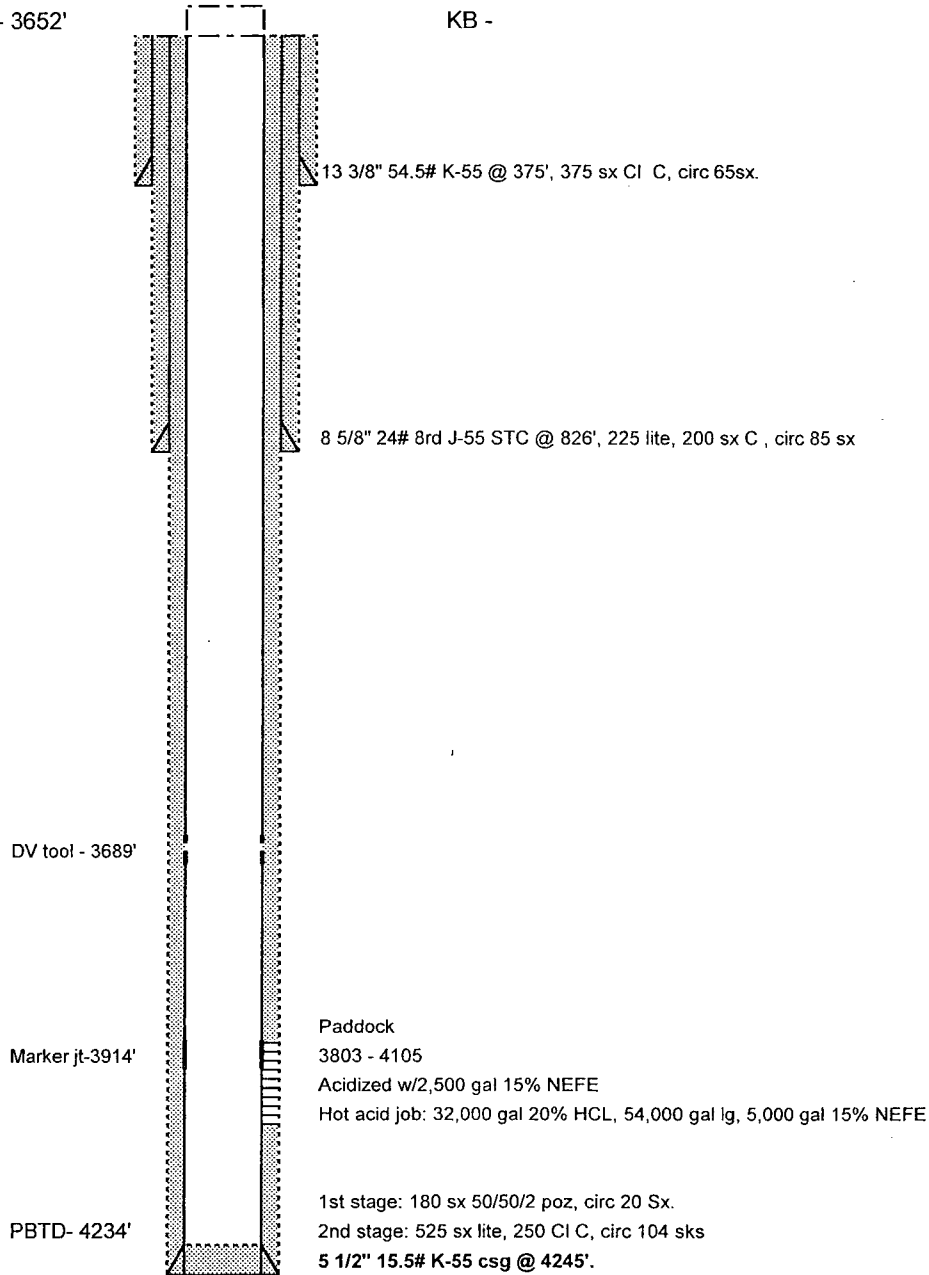
State S-19 # 10
O-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 8/3/00

Elevation - 3652'

KB -



1/29/2010

State S-19 # 10 Wellbore diagram.xls

SHodges

COG OPERATING LLC

Lease & Well #
API# 30-015-31503

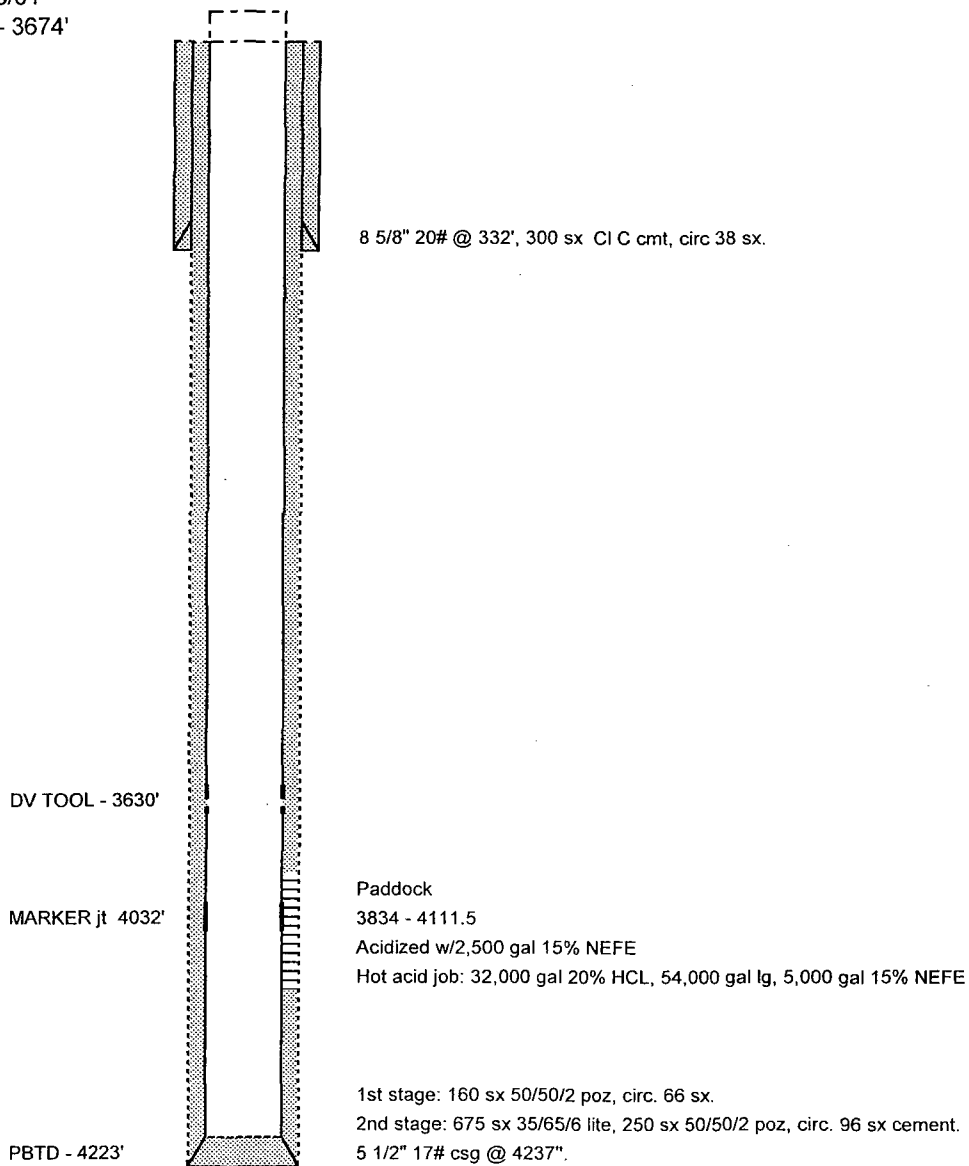
State S-19 #17

ACTIVE

Eddy County, NM

Sec 19 T17S R29E, 2250 FSL & 1233 FWL

Spud: 3/28/01
Elevation - 3674'



COG OPERATING LLC

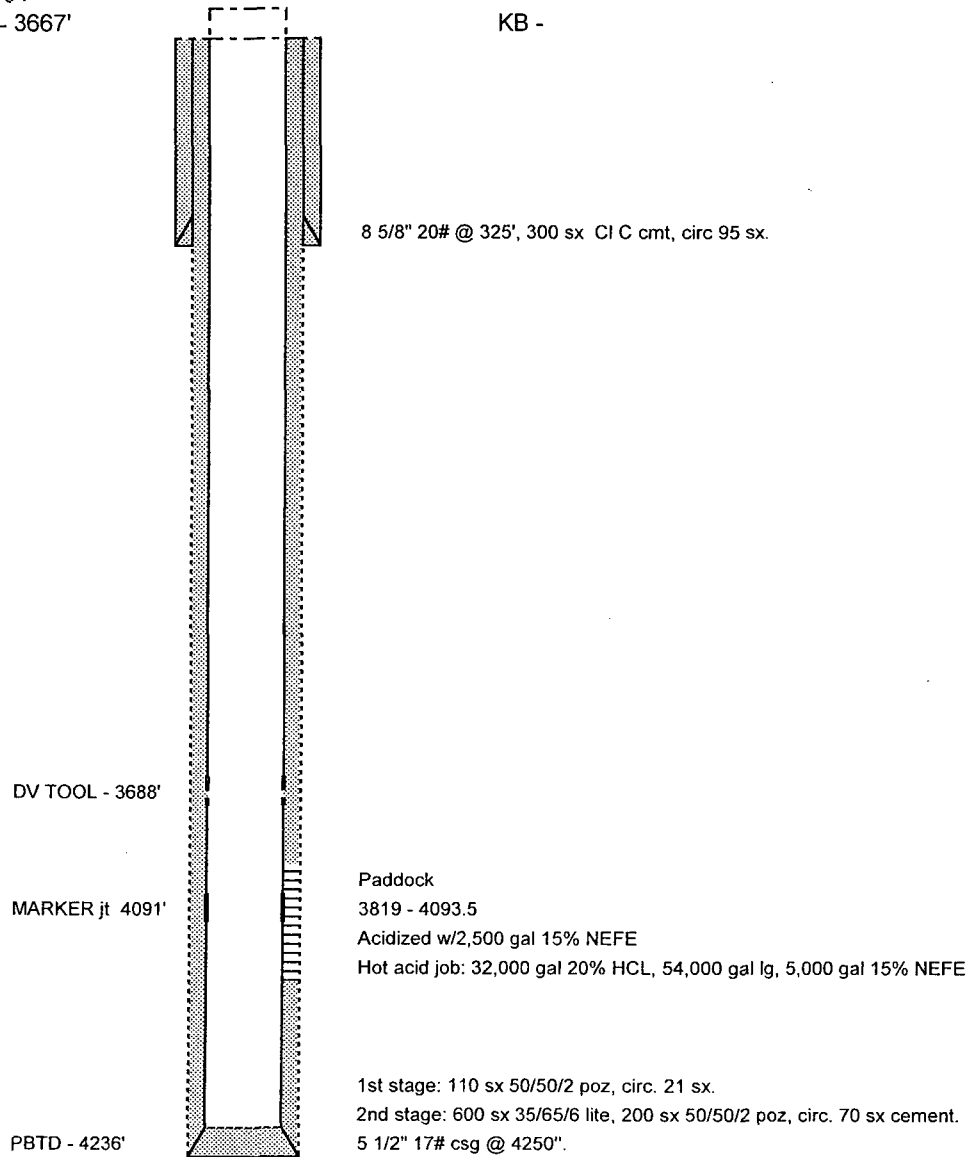
Lease & Well #
API # 30-015-31504

State S-19 #18

ACTIVE
K-19-17S-29E
EDDY CO., NM

Spud: 1/4/01
Elevation - 3667'

KB -



COG Operating, LLC

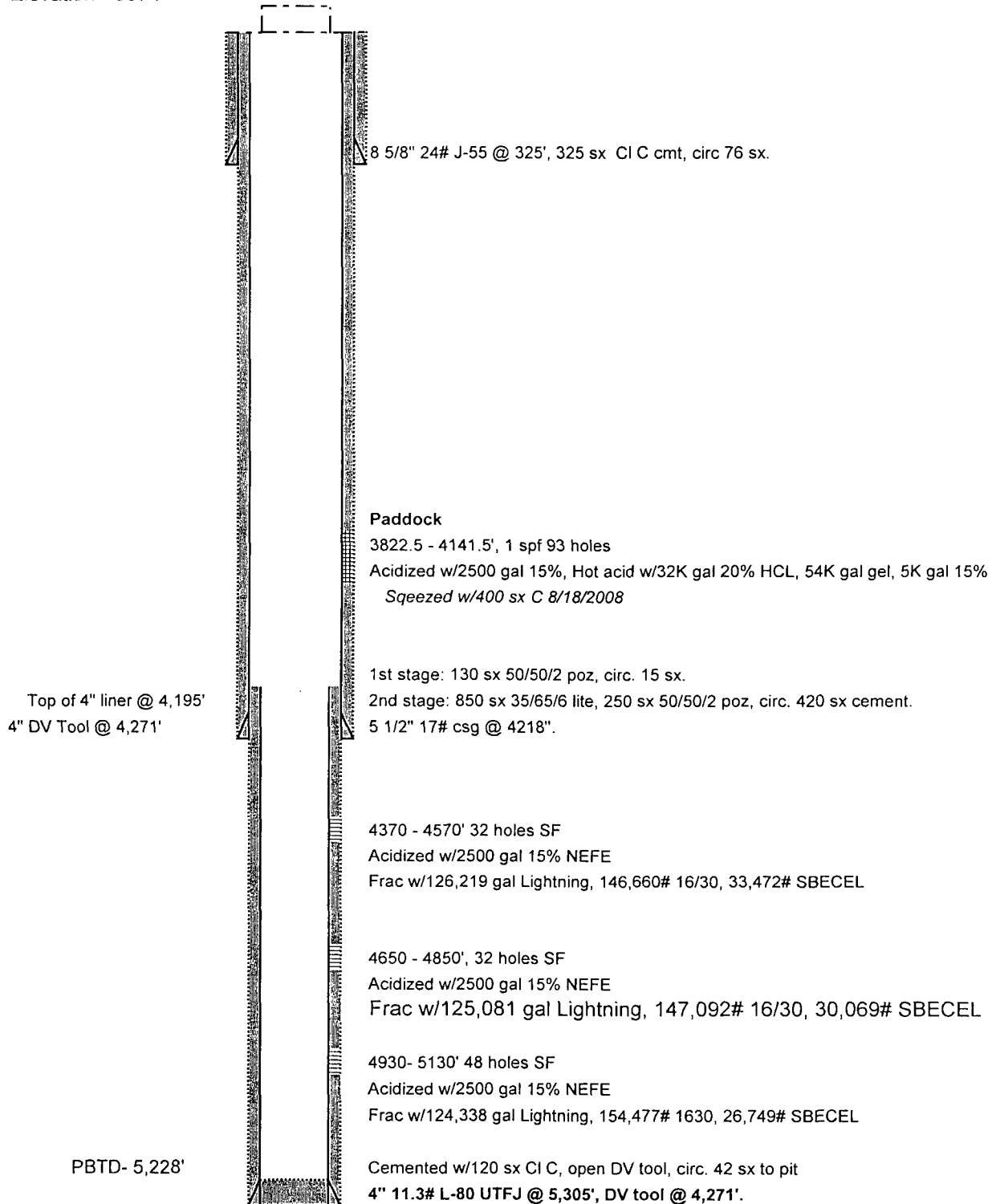
ACTIVE

Lease & Well #
30 015 32059

State S-19 #19

Spud: 11/8/01
Elevation - 3674'

Eddy Co., NM
Sec 19 T17S R29E 3210 FSL & 550 FWL



COG OPERATING LLC

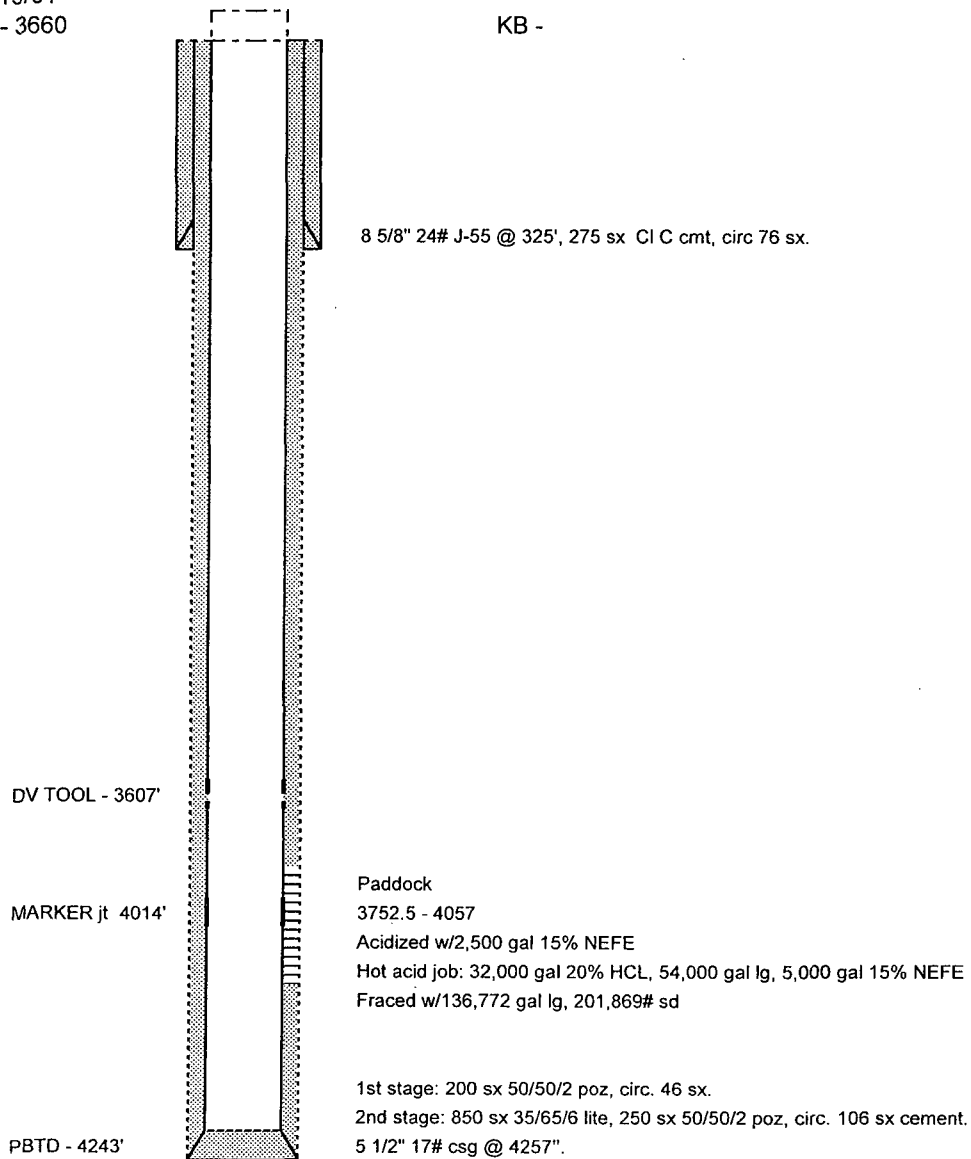
Lease & Well #
API# 30-015-32060

State S-19 #20
M-19-17S-29E

ACTIVE

Spud: 12/19/01
Elevation - 3660

KB -



COG OPERATING LLC

ACTIVE

Lease & Well # State S 19 #21

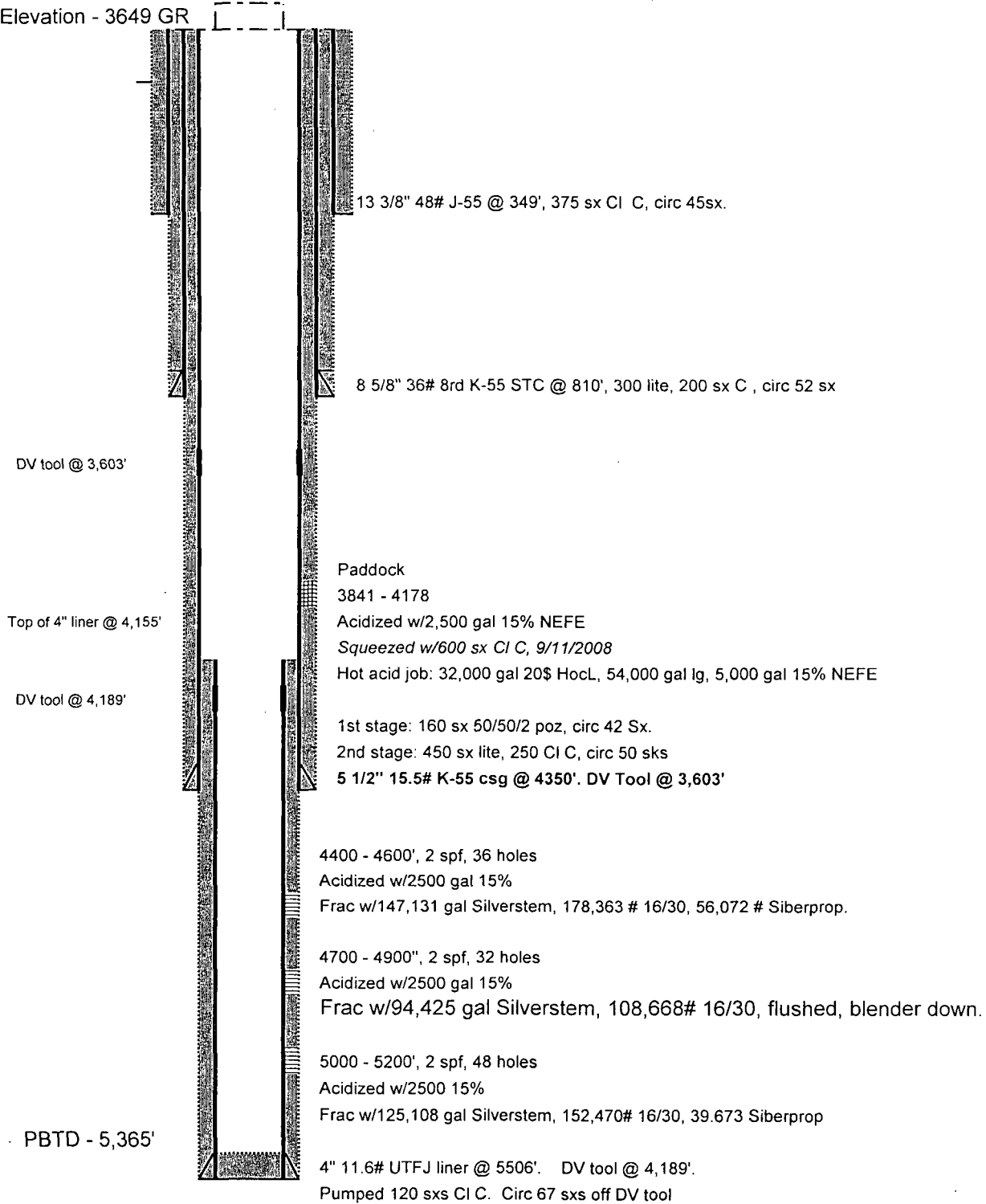
30-015-32062

Eddy County, NM

Sec 19 T17S R29E 1650 FSL 2310 FEL

SPUD- 9/11/2008

Elevation - 3649 GR



COG Operating LLC

Lease & Well #
API# 30-015-34827

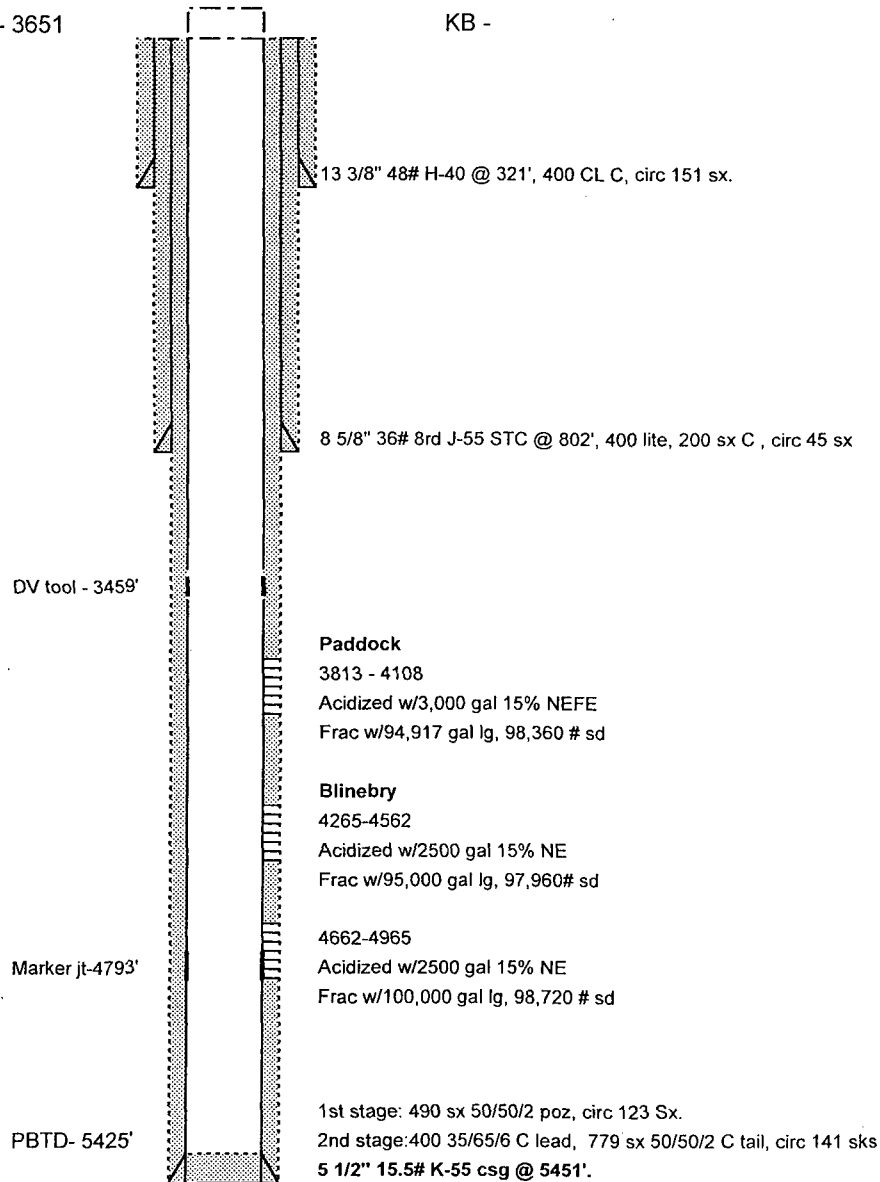
State S-19 # 25
O-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/29/06

Elevation - 3651

KB -



COG Operating LLC

Lease & Well #
API# 30-015-34829

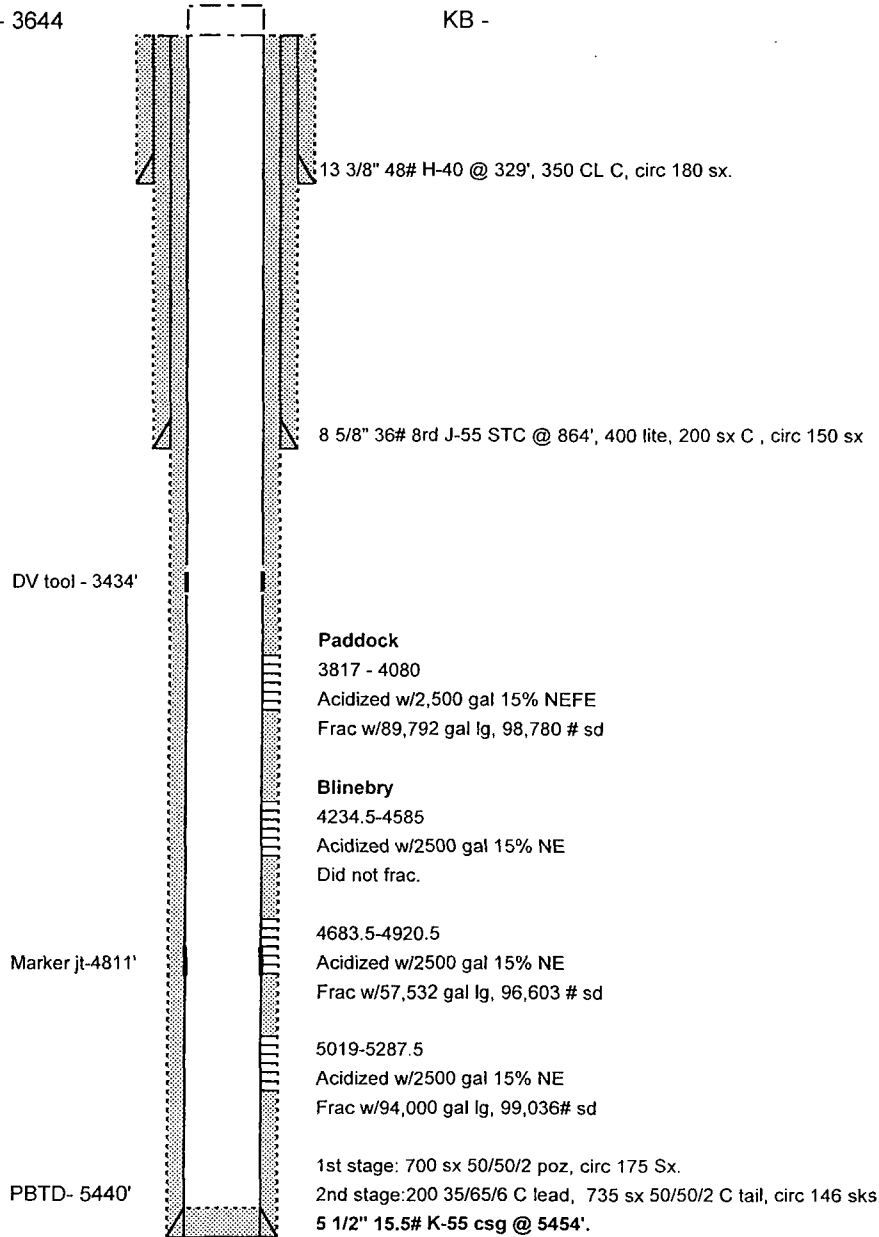
State S-19 # 27
O-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 10/29/06

Elevation - 3644

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35261

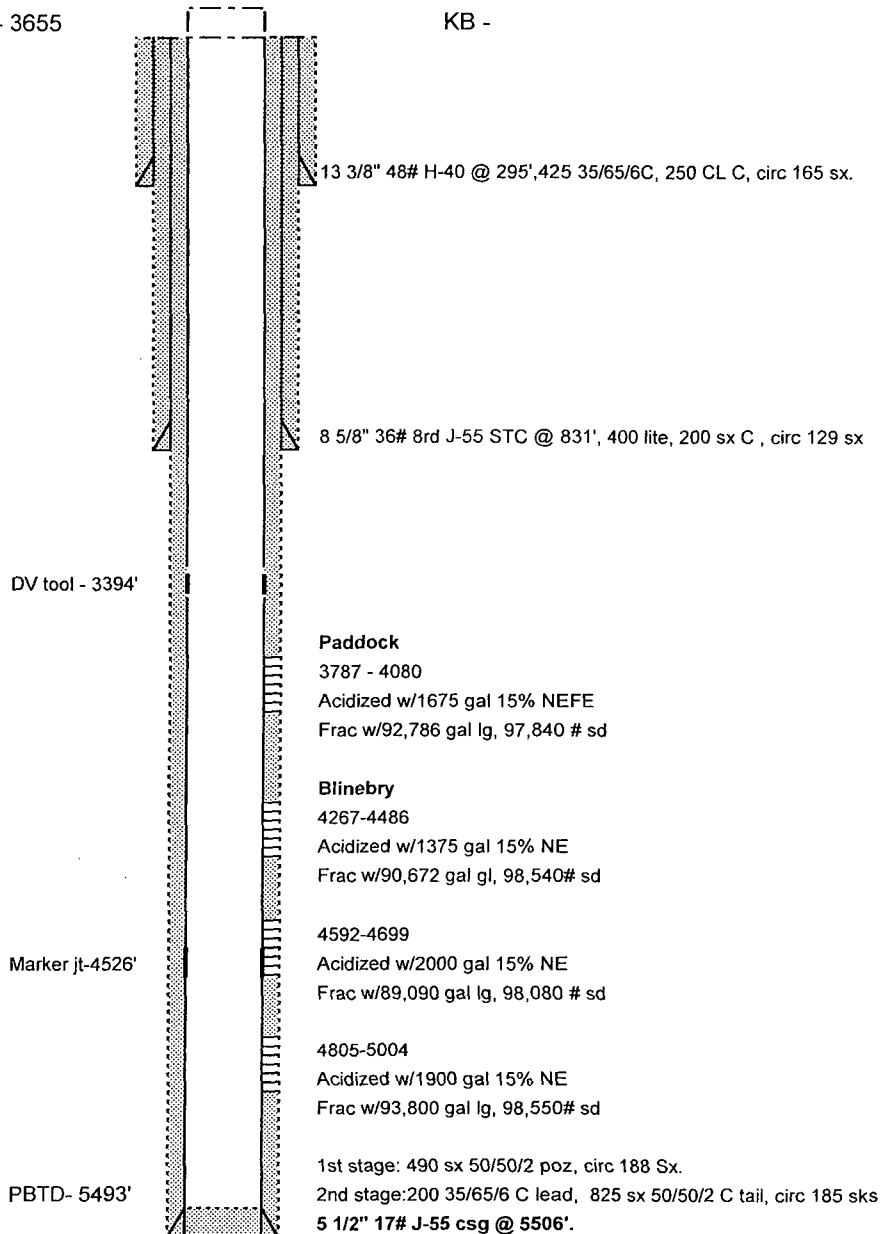
State S-19 # 29
N-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 3/30/07

Elevation - 3655

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35241

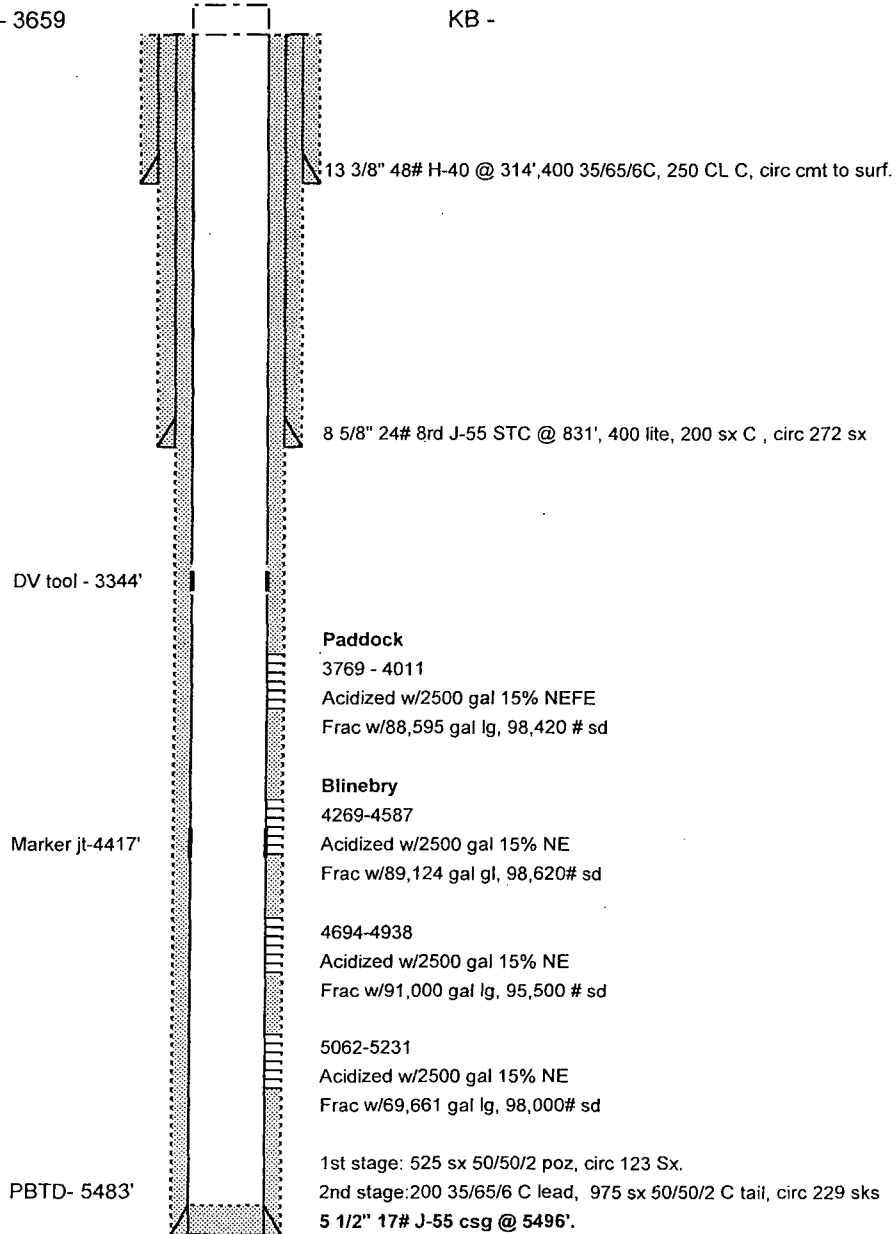
State S-19 # 30
M-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 7/25/07

Elevation - 3659

KB -



COG Operating LLC

Lease & Well #
API # 30-015-35242

State S-19 # 31

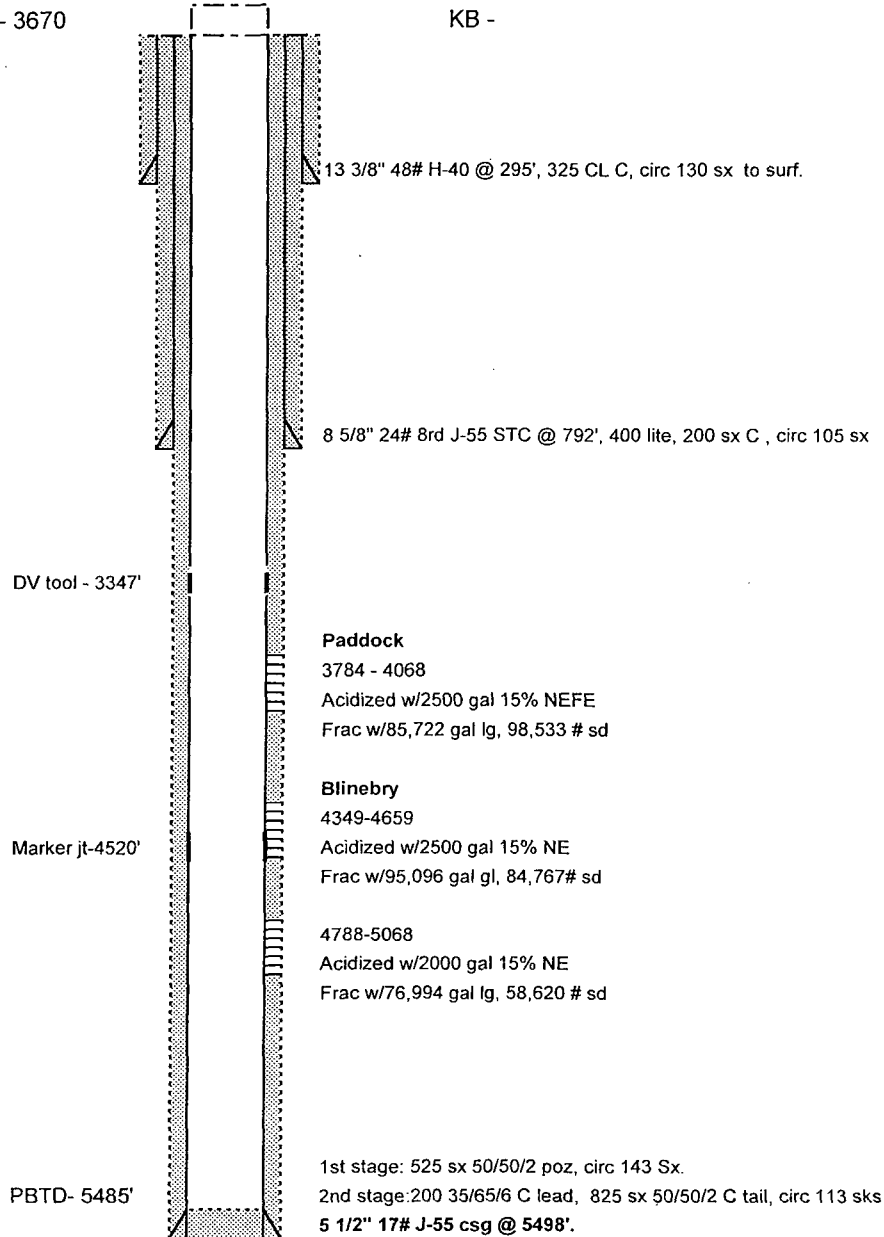
Active

Sec 19L T 17S R 29E
Eddy Co., NM

SPUD- 4/16/07

Elevation - 3670

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35743

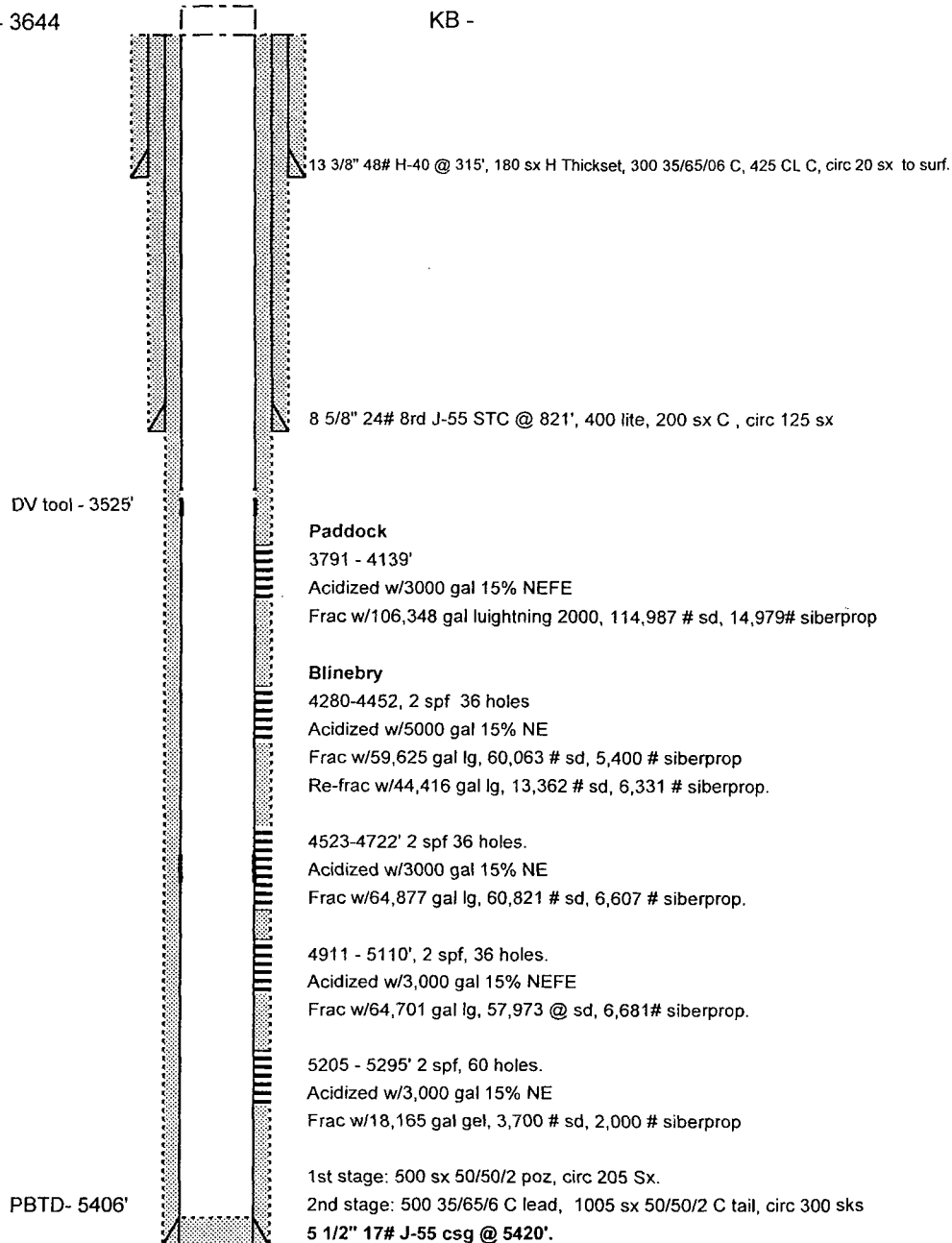
State S-19 # 32
N-19-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 8/24/07

Elevation - 3644

KB -



COG Operating, LLC

Lease & Well #

30 015 35922

Spud - 12/27/2007

State S 19 #33

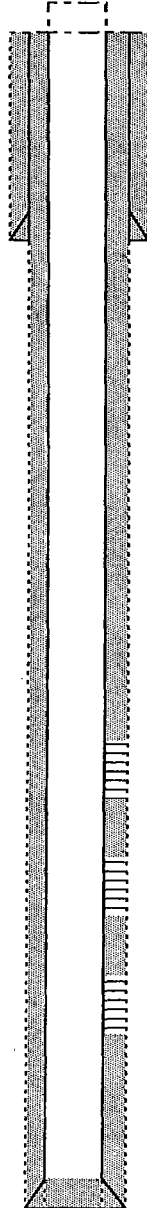
ACTIVE

Eddy Co., NM

Sec 19 T17S R 29E 1650 FSL & 1250 FWL

Elevation - 3668'

KB -



8 5/8" 24# @ 302', 300 sx cmt., circ. 157 sx

4455 - 4655', 36 holes

Acidized w/2500 gal 15% NEFE

Frac w/57,425 gal Lightning, 86,667# 16/30, 13,582# Siberprop

4750 - 4850', 36 holes

Acidized w/2500 gal 15% NEFE

Frac w/39,188 gal Lightning, 34,800# Siberprop

5120 - 4920'

Acidized w/2500 gal 15% NEFE

Frac w/67,731 gal Lightning, 75,284# 16/30, 14,984# Siberprop

PBTD-5378'

Cmt w/1200 sx lead, 400 sx tail, circ 180 sx.

5 1/2" 17# J-55, @ 5,418',

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	: NEW MEXICO	Final Status	: D&A
Field	: EDDY	Drill Total Depth	: 903
Operator Name	: EMPIRE	Log Total Depth	:
Lease Name	: DONNELLY DRLG CO	True Vertical Depth	:
Well Number	: 1	Spud Date	: JUN 16, 1953
API Number	: 30015030030000	Comp Date	: JUN 27, 1953
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: D	Reference Elevation	: 3661 DF
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453YTES YATES		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Township	: 17 S	Section	: 19 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 330 FSL 330 FWL CONGRESS SECTION
Latitude	: 32.8137200 Latitude (Bot) :
Longitude	: -104.1199100 Longitude (Bot) :
Lat./Long. Source	: TS

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454ANDR	ANHYDRITE PERMIAN / OCHOAN	560				DRLR	
453YTES	YATES	870				DRLR	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	345	10 SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

County	: NEW MEXICO	Final Status	: OIL
Field	: EDDY	Drill Total Depth	: 877
Operator Name	: AID	Log Total Depth	:
Lease Name	: DONNELLY DRLG CO	True Vertical Depth	:
Well Number	: CONTINENTAL-STATE		
API Number	: 2	Spud Date	: OCT 20, 1956
Regulatory API	: 30015030040000	Comp Date	: NOV 16, 1956
Init Lahee Class	:	Hole Direction	: VERTICAL
Final Lahee Class	: D	Reference Elevation	: 3660 DF
Permit Number	: DO	Ground Elevation	:
Geologic Province	:	KB Elevation	:
Formation at TD	: PERMIAN BASIN		
Oldest Age Pen	: 453SVRV SEVEN RIVERS		
Producing Formation	: 453 PERMIAN GUADALUPIAN		
Township	: 17 S	Section	: 19 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 990 FSL 330 FWL CONGRESS SECTION		
Latitude	: 32.8155400	Latitude (Bot)	:
Longitude	: -104.1199000	Longitude (Bot)	:
Lat/Long. Source	: TS		

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
	453SVRV	453SVRV	865	877			35	OPENHOLE	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	60	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	865	873	10000	GAL					FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	865	877		OPENHOLE	453SVRV	453SVRV				

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454ANDR	ANHYDRITE PERMIAN / OCHOAN	425				SPL	
454SALT	SALT	475				SPL	
453SVRV	SEVEN RIVERS	865				SPL	

Formation Tests

Test	Type	Top Depth	Base Depth	Top Form	Top Choke	Bottom Choke	Show
------	------	-----------	------------	----------	-----------	--------------	------

PI/Dwights PLUS on CD Well Summary Report

		DST		869	869								
		Pressure and Time											
		Hydro	Init Flow		Final Flow		Shut-in		Open Time		Shut-in Time		
Test	Init	Final	Init	Final	Init	Final	Init	Final	Init	Final	Init	Final	
001											60		
Pipe Recovery													
Test	Amount	Unit	Desc	Rec Type	Rec Method								
001	25	GAL	O		SMPL CHAMBER								
Casing Data													
	Size	Base Depth		Cement	Unit								
	7 IN	372											
	5 1/2 IN	865		15	SACK								

PI/Dwights PLUS on CD Well Summary Report**General Information**

Field	: NEW MEXICO	Final Status	: OIL
Operator Name	: EDDY	Drill Total Depth	: 925
Lease Name	: AID	Log Total Depth	:
Well Number	: KINCAID & WATSON DRLG <i>Serial</i>	True Vertical Depth	:
API Number	: HUMBLE-STATE	Spud Date	: JUL 15, 1956
Regulatory API	: 3	Comp Date	: JUL 30, 1956
Init Lahee Class	: 30015030070000	Hole Direction	: VERTICAL
Final Lahee Class	: D	Reference Elevation	: 3677 DF
Permit Number	: DO	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SVRV SEVEN RIVERS		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	:		
Township	: 17 S	Section	: 19 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 2310 FSL 1234 FWL CONGRESS SECTION
Latitude	: 32.8191700
Longitude	: -104.1169200
Lat./Long. Source	: TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			907	925			35	OPENHOLE	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	50	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001	60		170	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	907	925	15000	GAL					FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	907	925		OPENHOLE						

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453SVRV	SEVEN RIVERS	909				SPL	

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	368	50 SACK
5 1/2 IN	907	50 SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 955
Field	: AID	Log Total Depth	:
Operator Name	: KINCAID & WATSON DRLG <i>Dora</i>	True Vertical Depth	:
Lease Name	: HUMBLE-STATE		
Well Number	: 4	Spud Date	: OCT 30, 1956
API Number	: 30015030080000	Comp Date	: NOV 18, 1956
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3652 DF
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 000UNKWN UNKNOWN		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	:		
Township	: 17 S	Section	: 19 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 990 FSL 1235 FWL CONGRESS SECTION		
Latitude	: 32.8155400	Latitude (Bot)	:
Longitude	: -104.1169500	Longitude (Bot)	:
Lat/Long. Source	: TS		

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			865	900	07/64			OPENHOLE	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	60	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001			70	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	865	900	20000	GAL					FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	865	900		OPENHOLE						

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454SALT	SALT	430				DRLR	
453SVRV	SEVEN RIVERS	870				DRLR	

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	352	
5 1/2 IN	865	50 SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 901
Field	: AID	Log Total Depth	:
Operator Name	: DONNELLY DRILLING CO. <i>Donna</i>	True Vertical Depth	:
Lease Name	: SINCLAIR-STATE A		
Well Number	: 1	Spud Date	: MAY 13, 1956
API Number	: 30015030050000	Comp Date	: JUN 20, 1956
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3675 DF
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SVRV SEVEN RIVERS		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	:		
Township	: 17 S	Section	: 19 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 1980 FSL 452 FWL CONGRESS SECTION
Latitude	: 32.8182600
Longitude	: -104.1194800
Lat./Long. Source	: TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			882	901			32	OPENHOLE	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	40	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001	340		340	

IP Bottom Hole

Test	Press	Temp	Depth	Time
001				

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	882	890	10000	GAL					FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	882	901		OPENHOLE						

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
401	SPL				

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	333	25 SACK
5 1/2 IN	882	25 SACK

BP OF NORTH AMERICA

Lease & Well # Empire Abo #45

ACTIVE

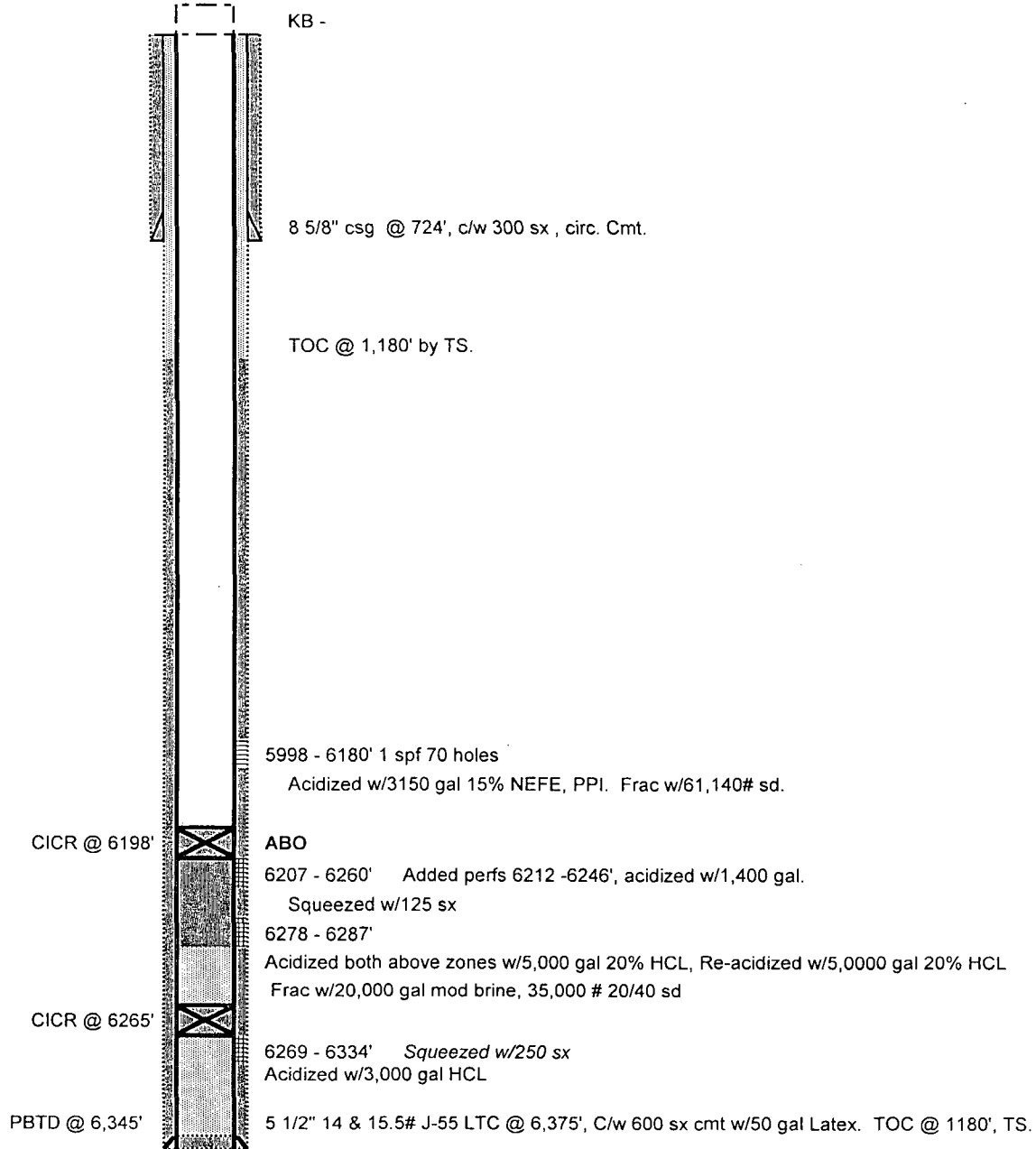
30 015 03188

Eddy Co., NM

Spud - 12/30/1960

Sec 30 L, T17S, R29E, 2310 FNL & 330 FWL

Elevation - 3670' DF



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit #46

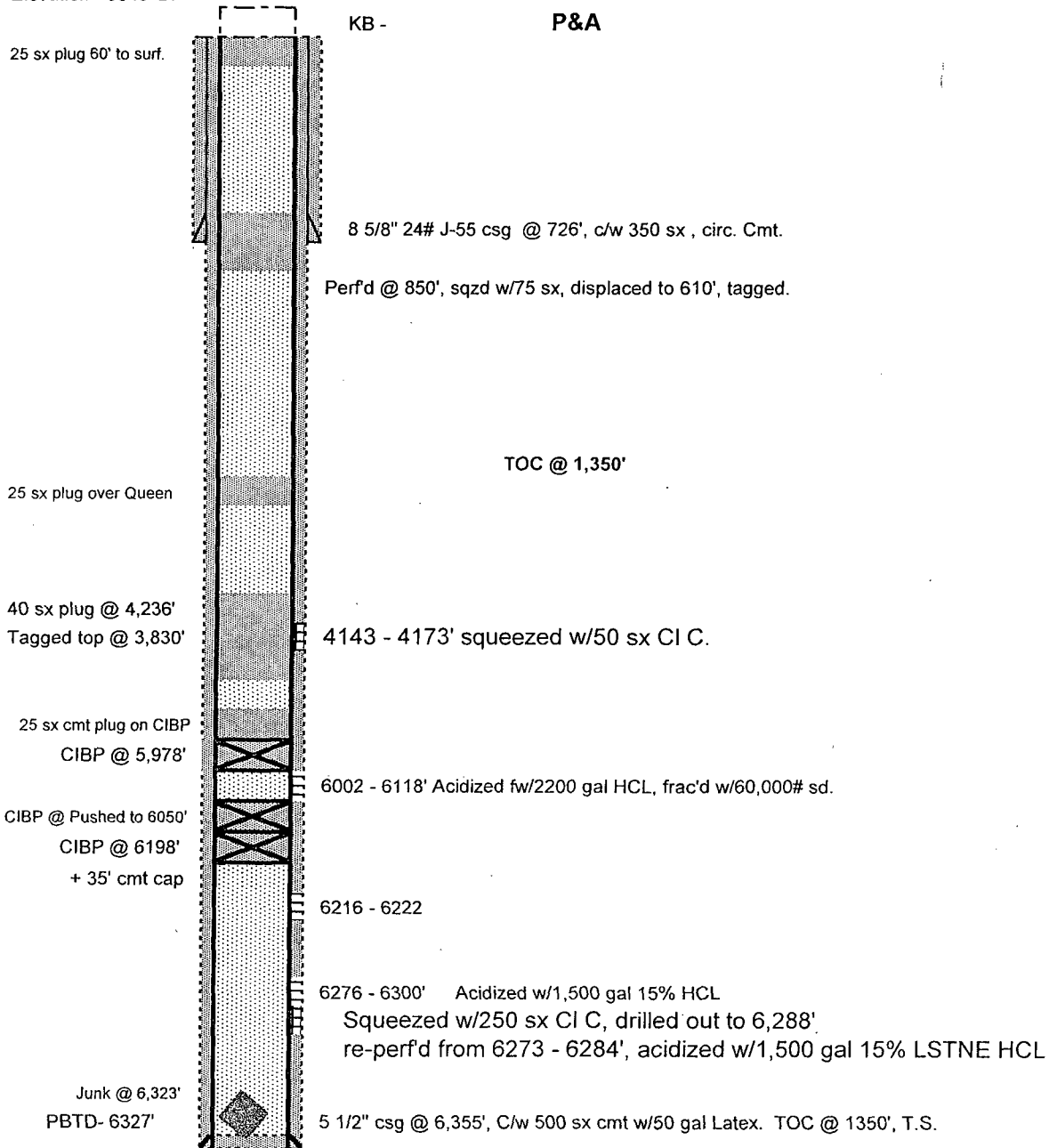
30 015 03189

Spud - 7/1/1961

Elevation - 3643' DF

Eddy Co., NM

Sec 30 E, T17S, R29E, 3210 FNL & 1254 FWL



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit #47

ACTIVE

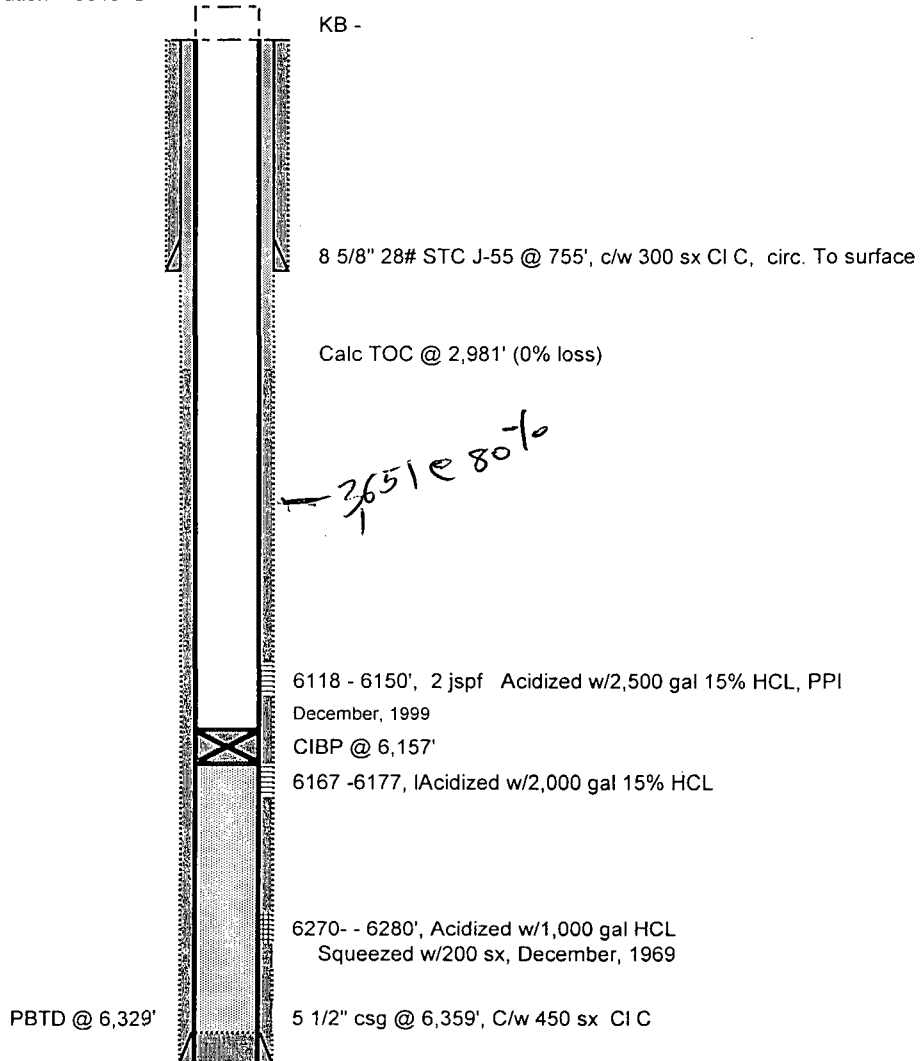
API # 30-015-03193

EDDY CO., NM

Spud - 9/30/1961

Sec 30 J, T17S, R29E, 2150 FSL & 3210 FEL

Elevation - 3646' GR



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit #47A

P&A

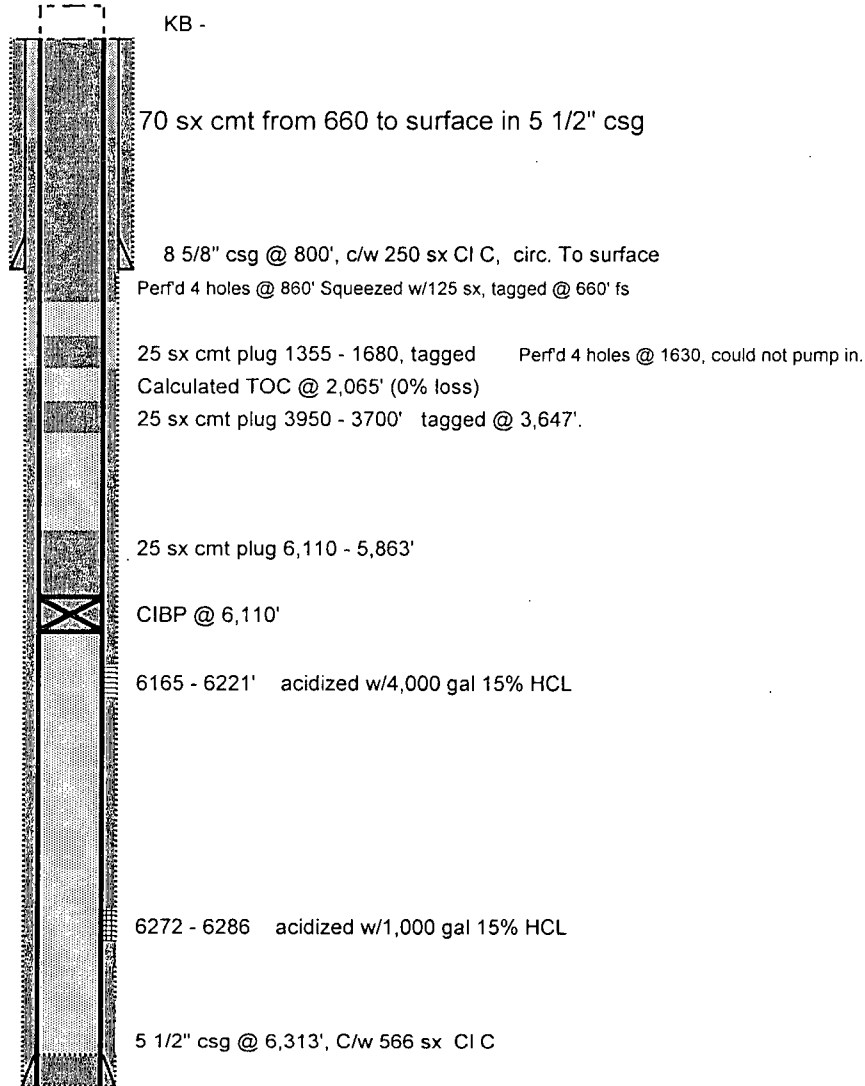
30 015 03197

EDDY Co., NM

Spud - 11/21/1961

Sec 30 G, T17S, R29E, 2310 FNL & 2310 FEL

Elevation - 3643' GR



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit C #48

Injection well

ACTIVE

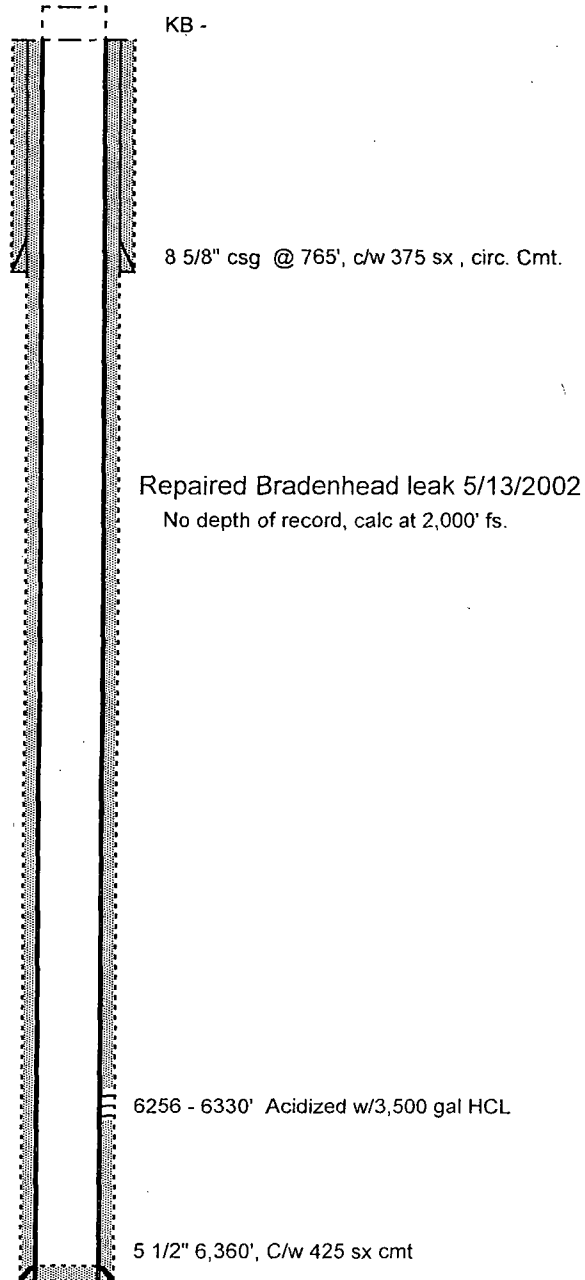
30 015 03192

Eddy Co., NM

Spud - 10/18/1961

Sec 30 L, T17S, R29E, 1980 FSL & 330 FWL

Elevation - 3642' KB



PBTD - 6343'

BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit C #45 A

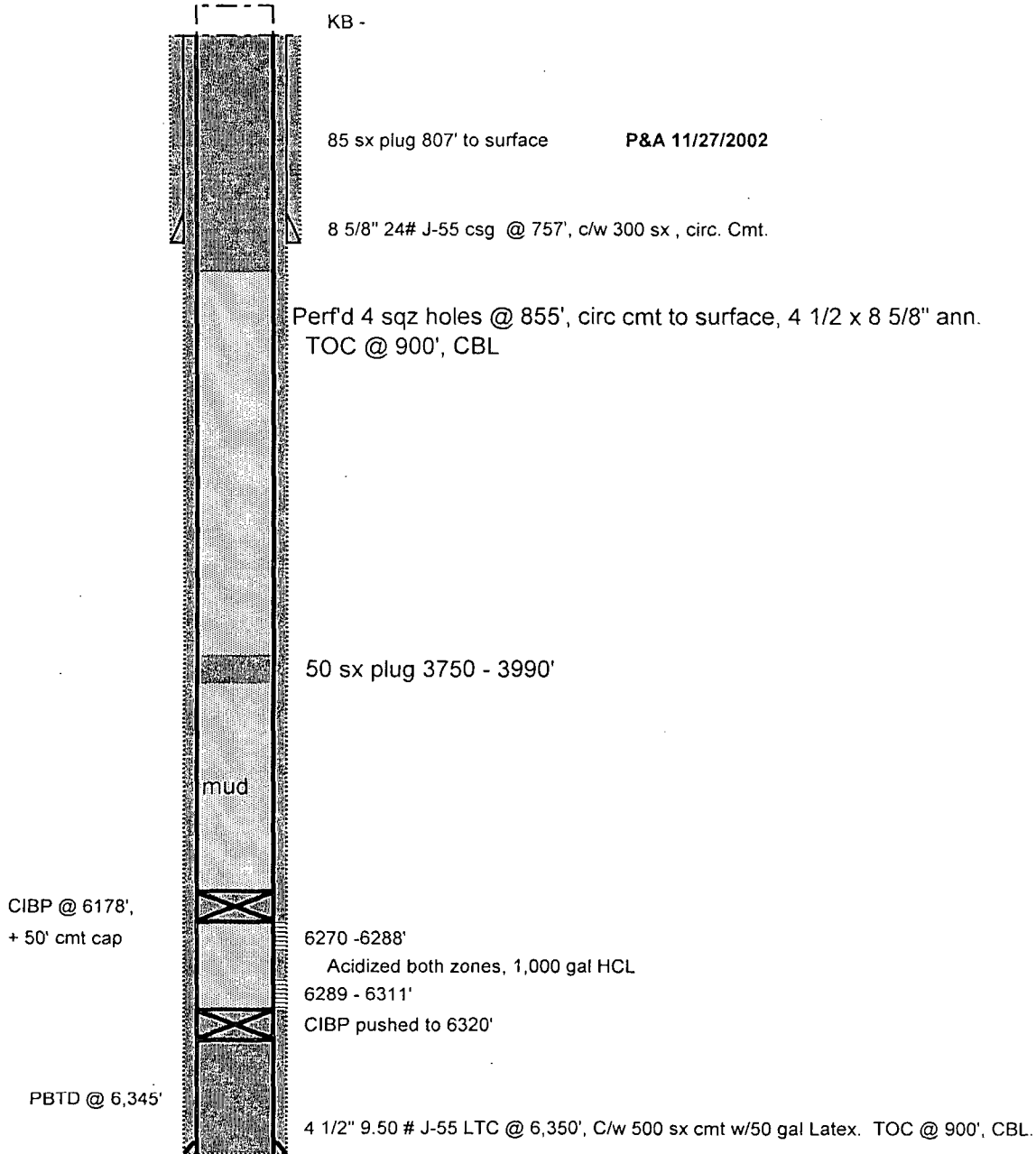
30 015 03190

Eddy Co., NM

Spud - 10/22/1961

Sec 30 L, T17S, R29E, 1980 FSL & 330 FWL

Elevation - 3664' DF

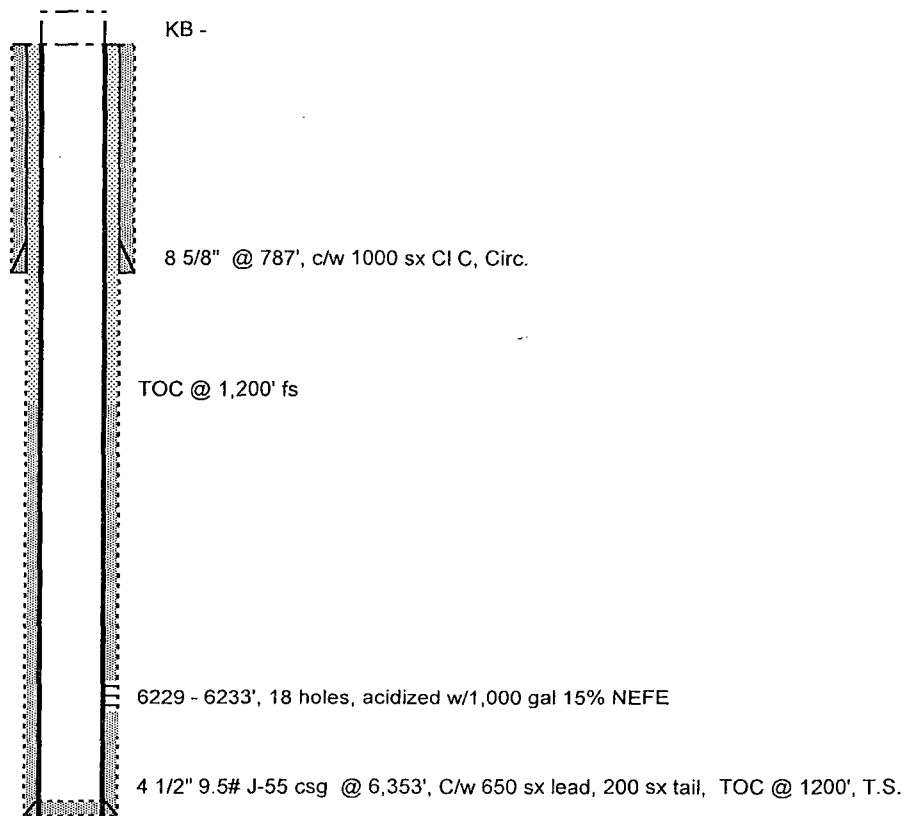


ACTIVE

Eddy Co., NM

Sec 30 L, T17S, R29E, 2314 FSL & 1256 FWL

Elevation - 3660



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit #47A

P&A

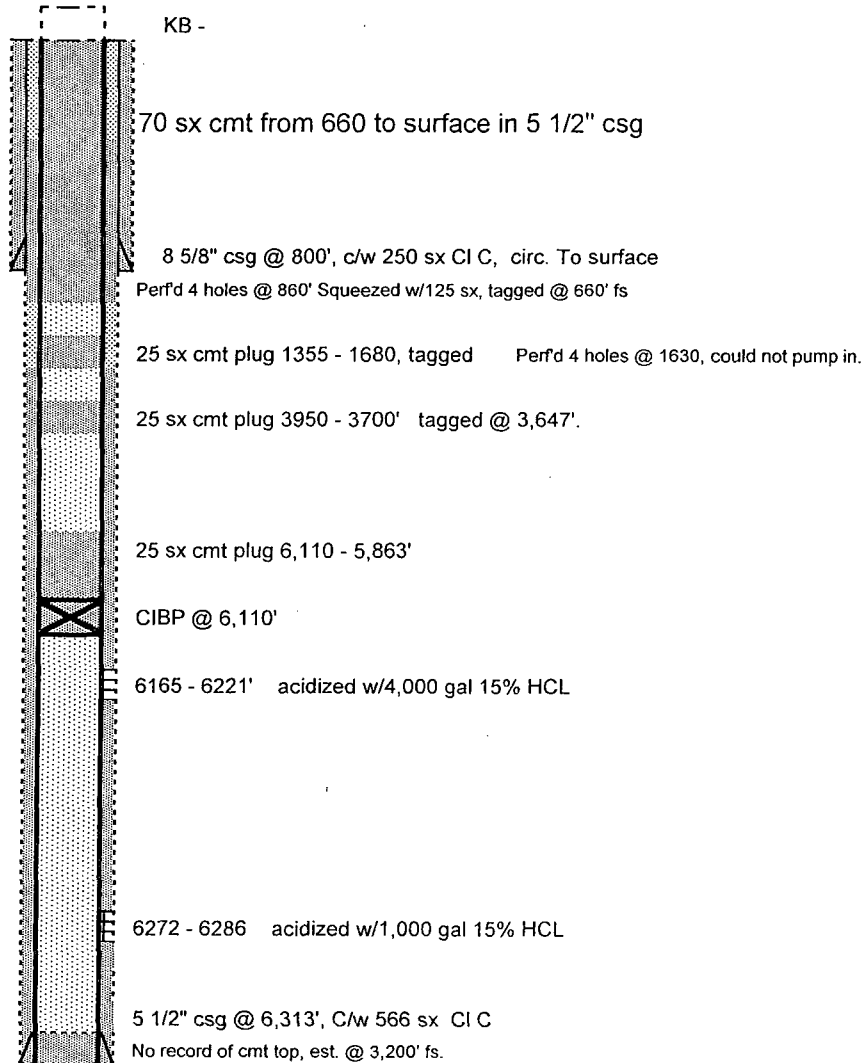
30 015 03197

EDDY Co., NM

Spud - 11/21/1961

Sec 30 F, T17S, R29E, 2310 FNL & 3210 FEL

Elevation - 3643' GR



BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit C #48A

Injection well ACTIVE

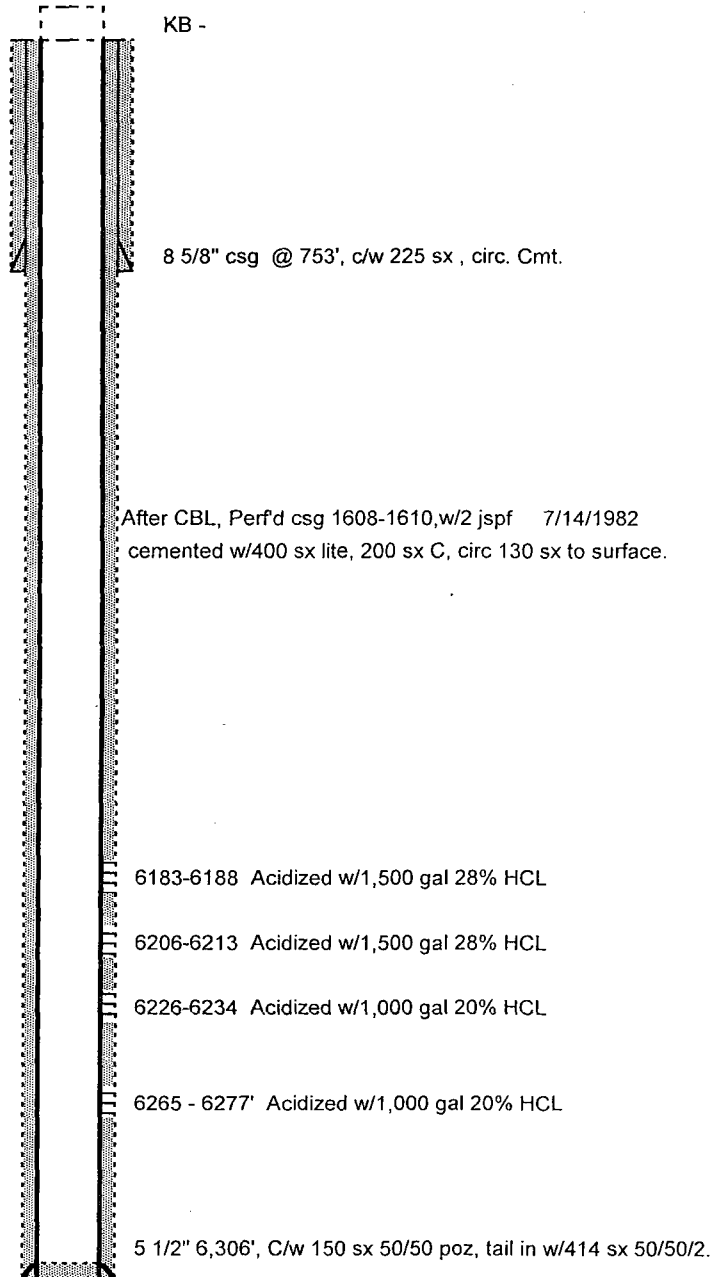
30 015 03195

Eddy Co., NM

Spud - 12/8/1961

Sec 30 H, T17S, R29E, 2310 FSL & 99 FEL

Elevation - 3643' KB



BP OF NORTH AMERICA

Lease & Well #
30 015 21545

Empire South Deep Unit #7

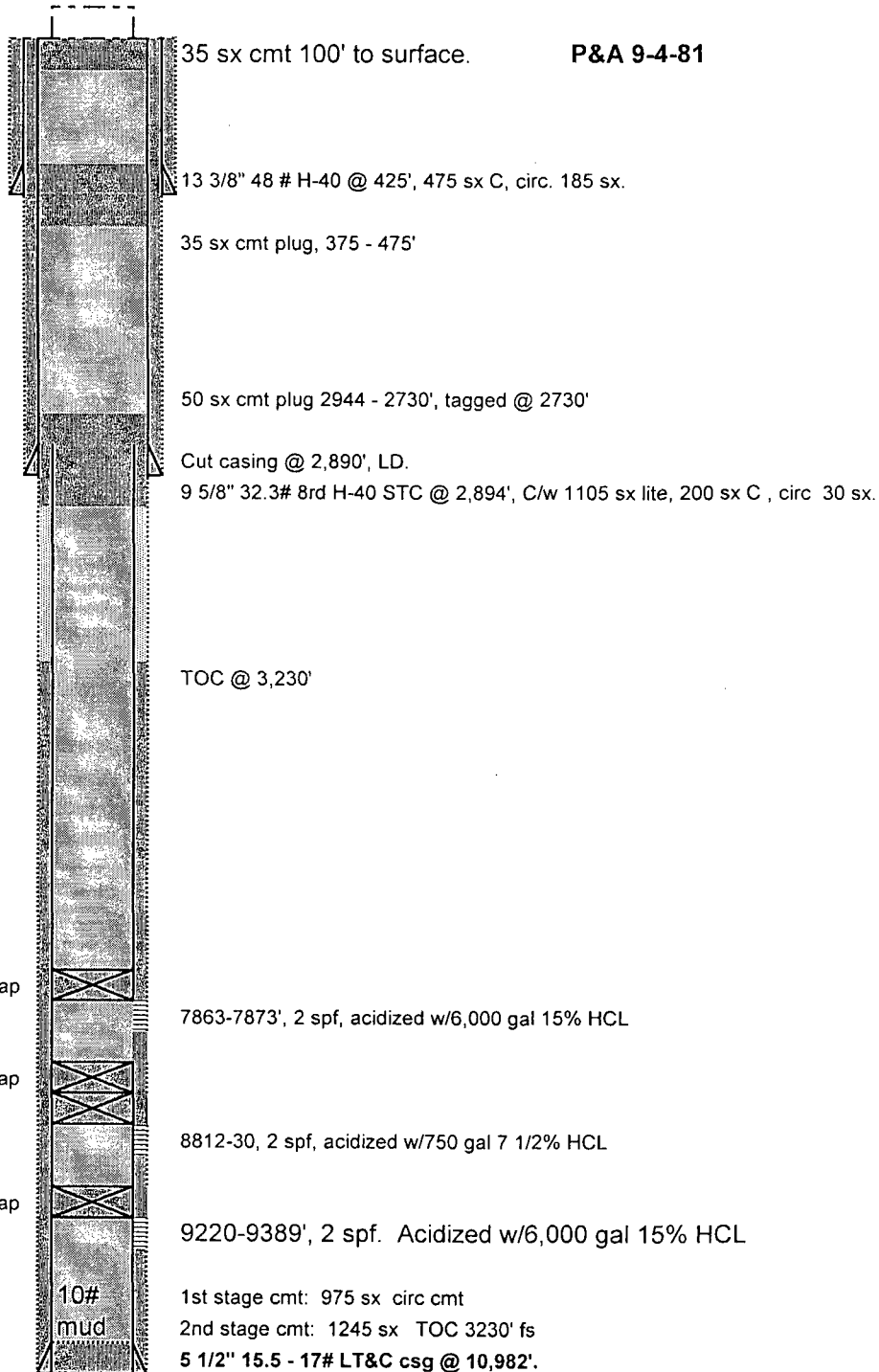
SPUD - 5/26/1975

EDDY Co., NM

Sec 30 O T13S R38E 760 FSL & 3210 FEL

Elevation - 3637' GR

P&A 9-4-81



PBTD- 6,989'

NADEL AND GUSSMAN HEYCO

ACTIVE

Lease & Well #
30 015 22000

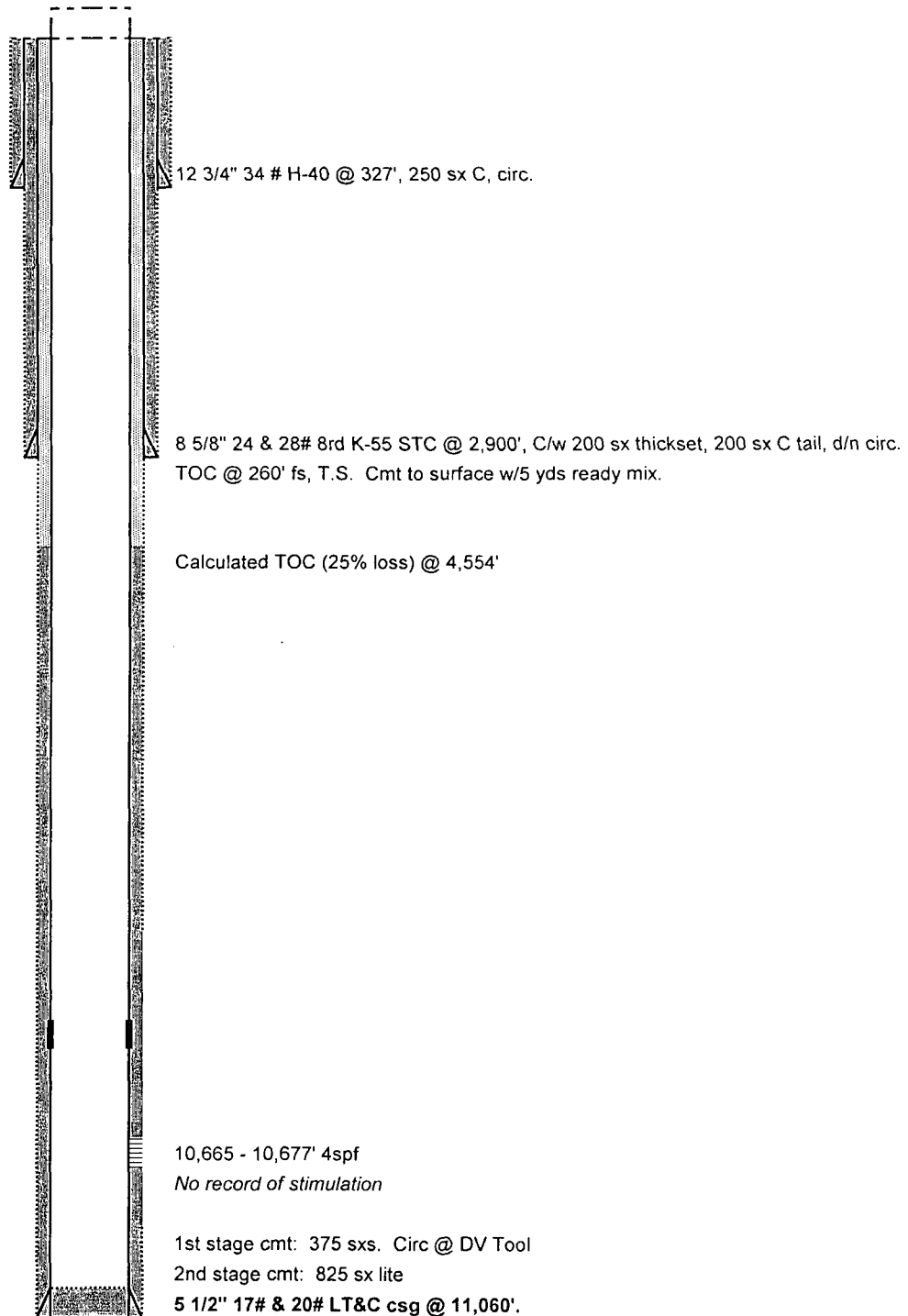
Empire S Deep Unit #13

Eddy Co., NM

SPUD - 12/15/95

Sec 30 T17S R29E 660 FSL & 1980 FWL

Elevation - 3646'



HARVEY YATES CO., INC

Lease & Well #
30 015 22400

Empire S Deep Unit #18

P&A 11-5-88

SPUD - 4/8/1978

Eddy Co., NM

Sec 30 T17S R29E 1980 FNL & 1980 FWL

Elevation - 3643'

10 sx cmt plug 30' to surface

100' cmt plug 4450-350'

12 3/4" 34 # H-40 @ 400', 475 sx C, circ. 21 SX

100' cmt plug 2850-2955'

8 5/8" 24 & 28# 8rd K-55 STC @ 2,895', C/w 750 sx lead, 200 sx C tail, d/n circ.
TOC @ 600' fs, T.S. Pump 250 sx down annulus, cmt to surface.

25 sx cmt plug @ 3580 -3680'

Cut casing @ 3,630'

TOC @ 4,010'

DV Tool @ 7,692'

7859 - 8022'

CIBP @ 7940'

cmt plug 8750 - 8850

25 sx cmt plug 10,000 - 10,100'

40 sx cmt plug 10,400 - 10,500'

MORROW
10,722 - 10,758' 120 holes
No record of stimulation

PBTD- 6,989'

1st stage cmt: 850 sx H w/add, circ 150 sx
2nd stage cmt: 575 sx lite lead, 100 sx H tail. TOC @ 4,010'.
5 1/2" 17# N-80 & K-55 LT&C csg @ 11,010'.

COG Operating LLC

Lease & Well #
API # 30-015-30-709

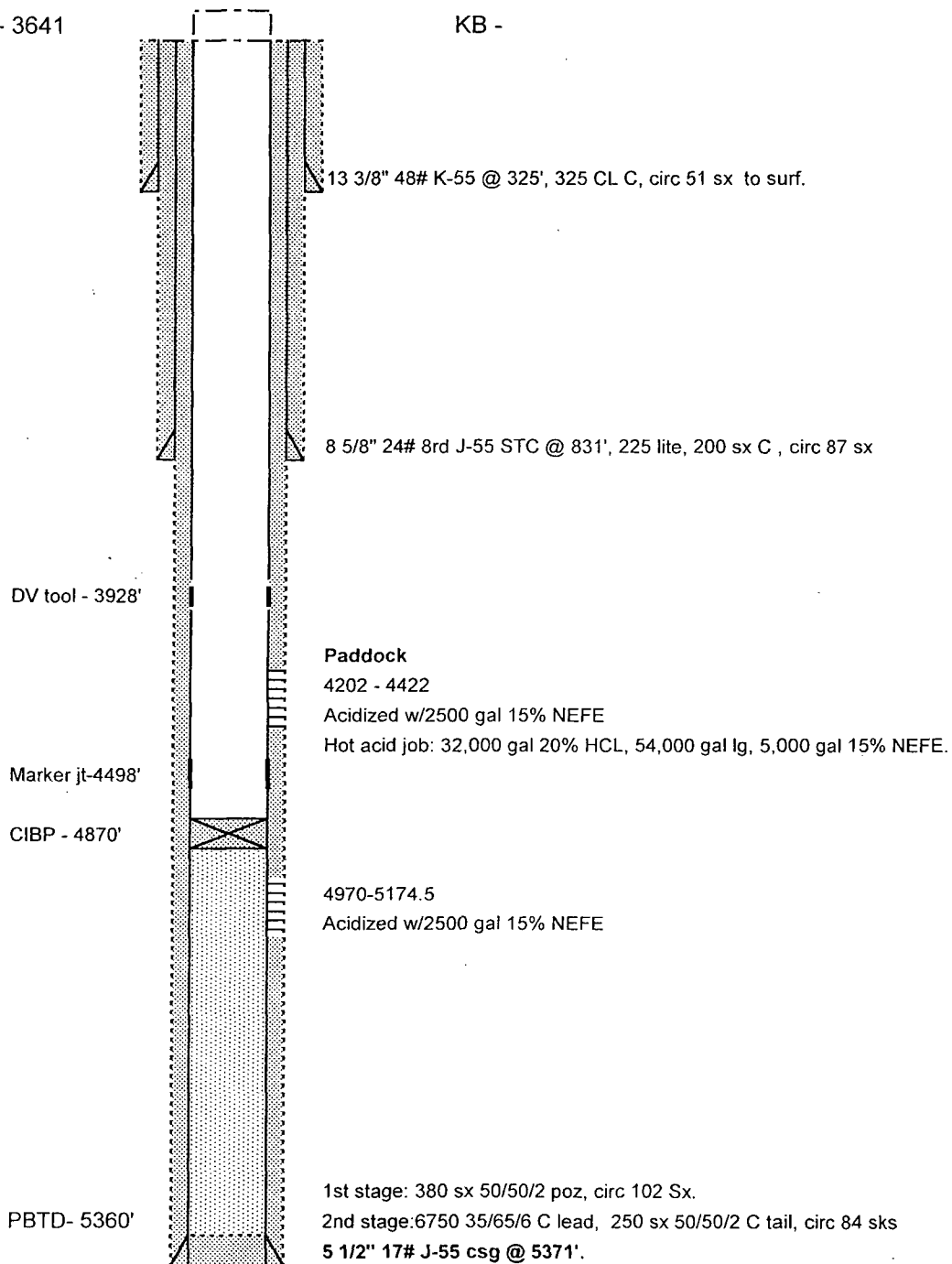
Cheyenne Federal #1

Active
Sec 20 O T 17S R 29E
Eddy Co., NM

SPUD- 8/16/00

Elevation - 3641

KB -



COG OPERATING LLC

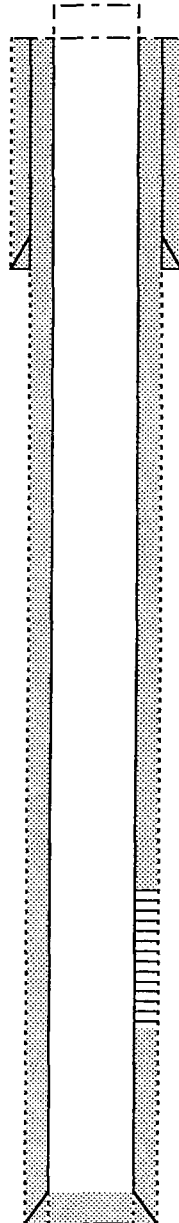
Lease & Well #
API# 301-015-29696
SPUD: 12/29/1987

Continental A State #1
C-30-17S-29E

ACTIVE
EDDY CO., NM

Elevation - 3650

KB -



8 5/8" 24# @ 349', 250 sx cmt. Circ sx.76

Paddock

3823-4075

Acidized w/2500 gal 15% NEFE

Hot acid job: 40,000 gal 20% HCL, 54,000 gal lg, 5,000 gal 15% NEFE

Frac w/93,564 gal lg, 109,420 # sd

1st stage: 160 sx 50/50/2 C, circ 54 sx.

2nd state: 775 sx 35/65/6 lead, 250 sx 50/50/2 C tail, circ 128 sx.

5 1/2" 17 # J-55 csg @ 4250'

PBTD- 4237'

COG OPERATING LLC

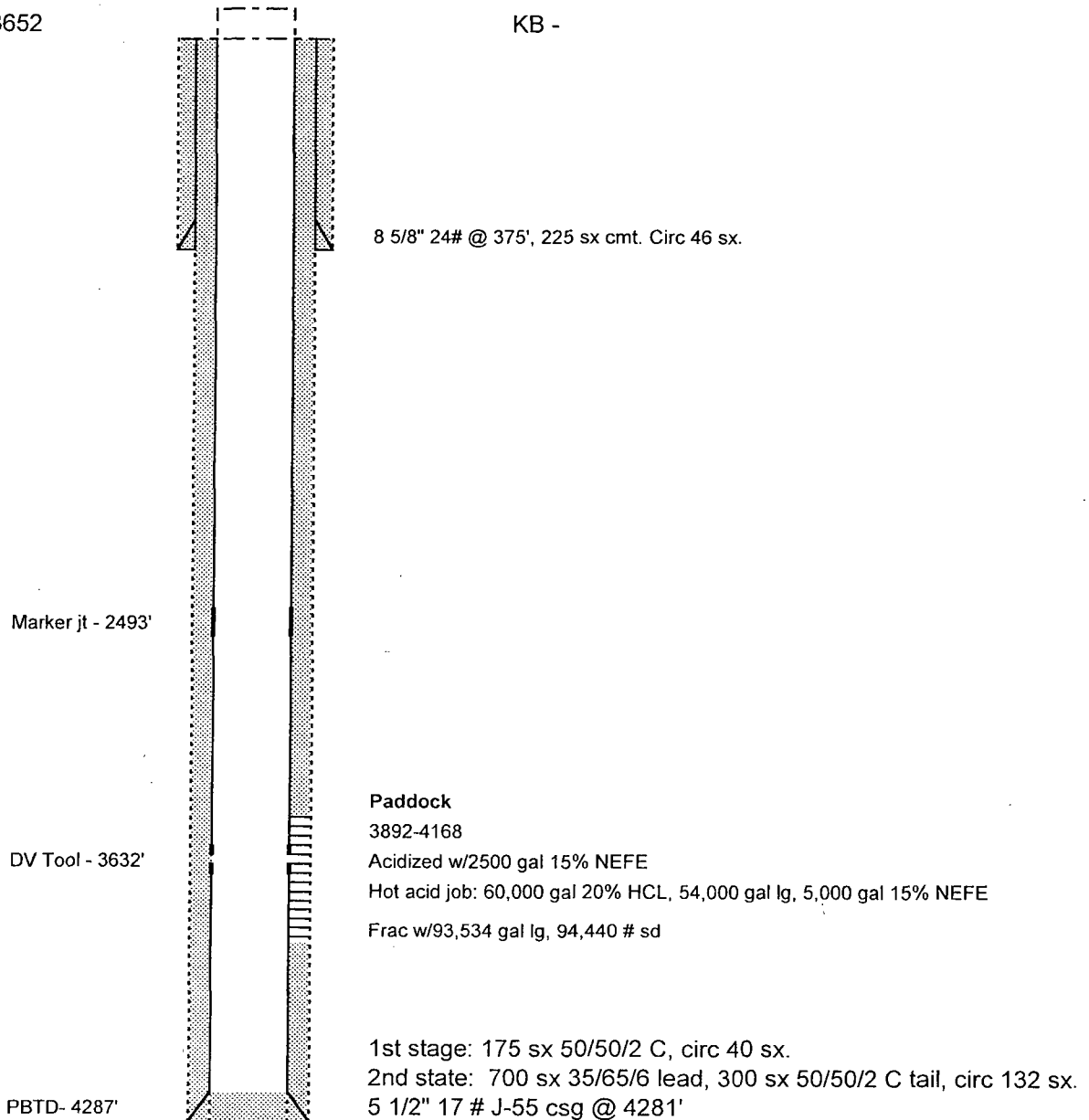
Lease & Well #
API# 30-015-29697
SPUD: 7/22/97

Continental A State #2
F-30-17S-29E

ACTIVE
EDDY CO., NM

Elevation - 3652

KB -



COG Operating LLC

Lease & Well #
API#30-015-34741

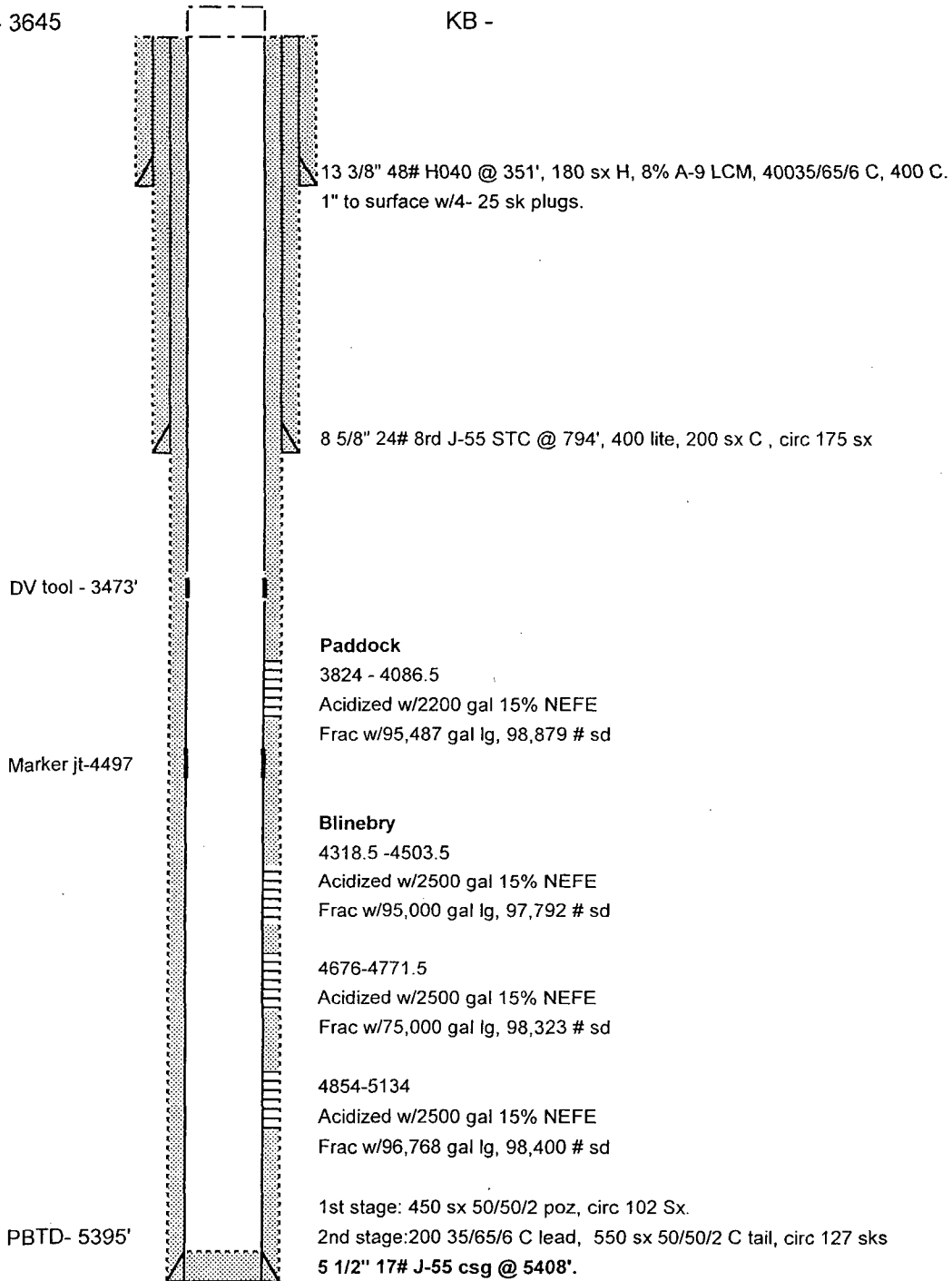
Continental A State #3
C-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/8/06

Elevation - 3645

KB -



COG Operating LLC

Lease & Well #
API# 30-015-34690

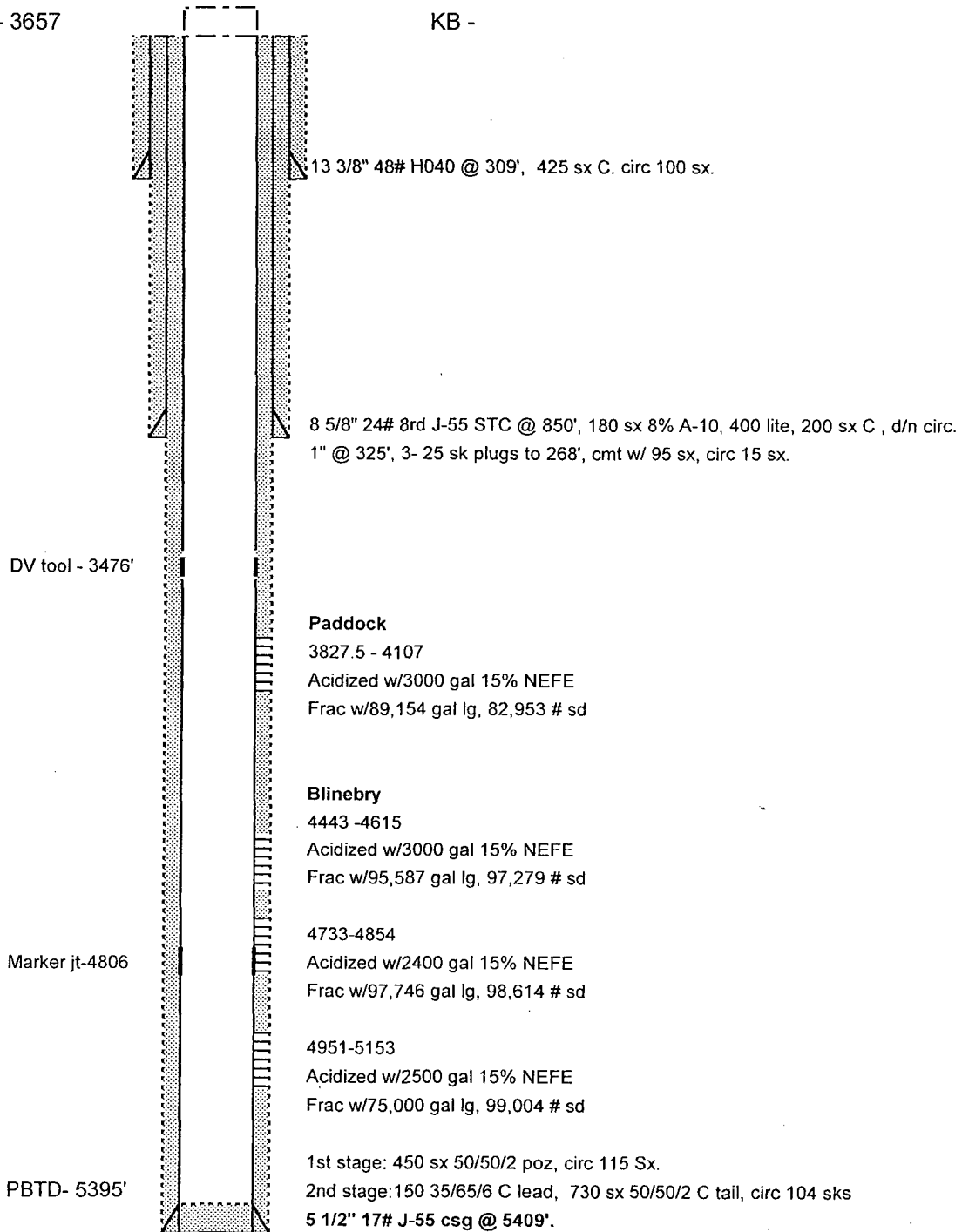
Continental A State #4
C-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 4/8/06

Elevation - 3657

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30518

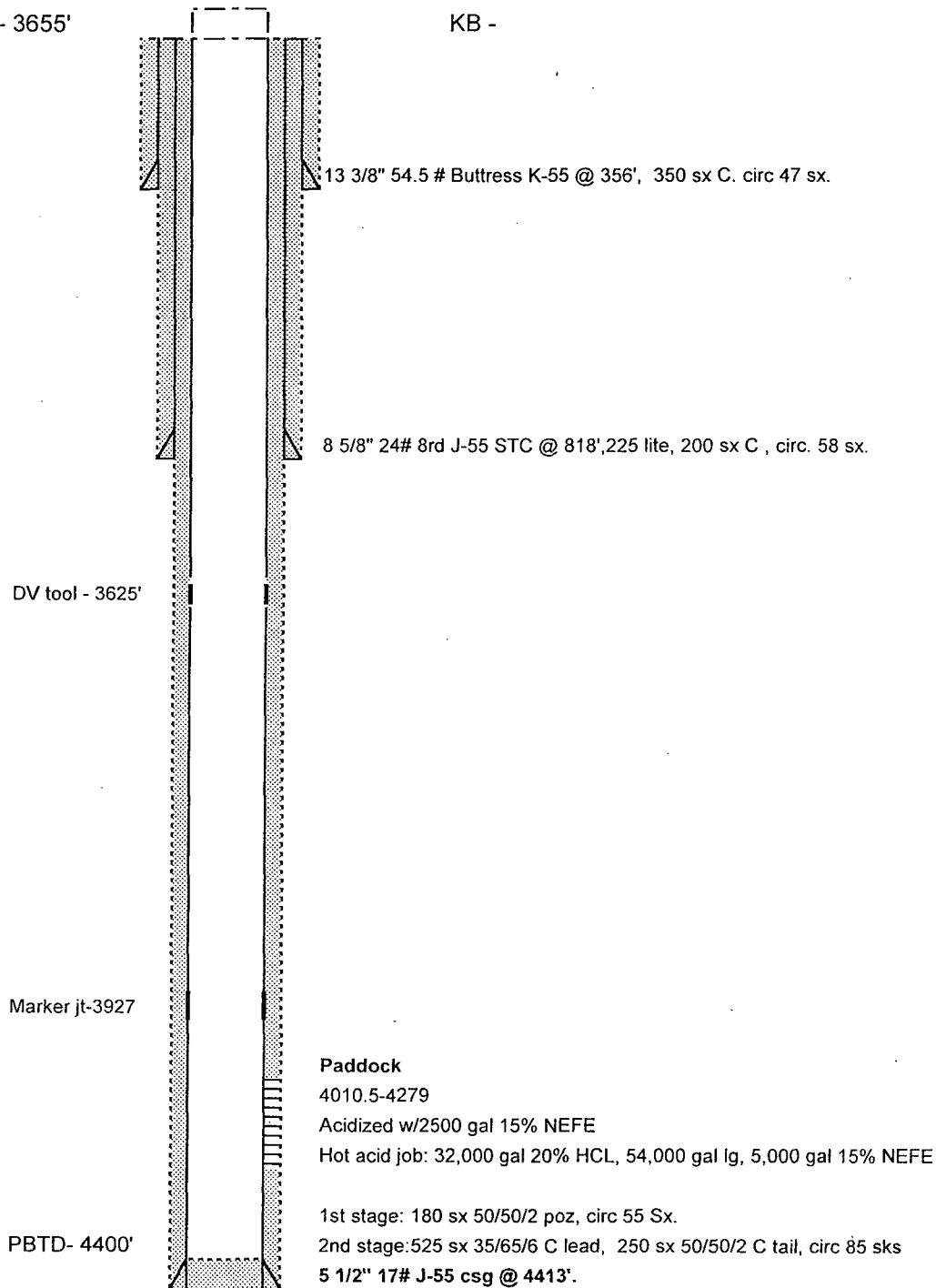
Continental A State #5
N-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 1/11/00

Elevation - 3655'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30610

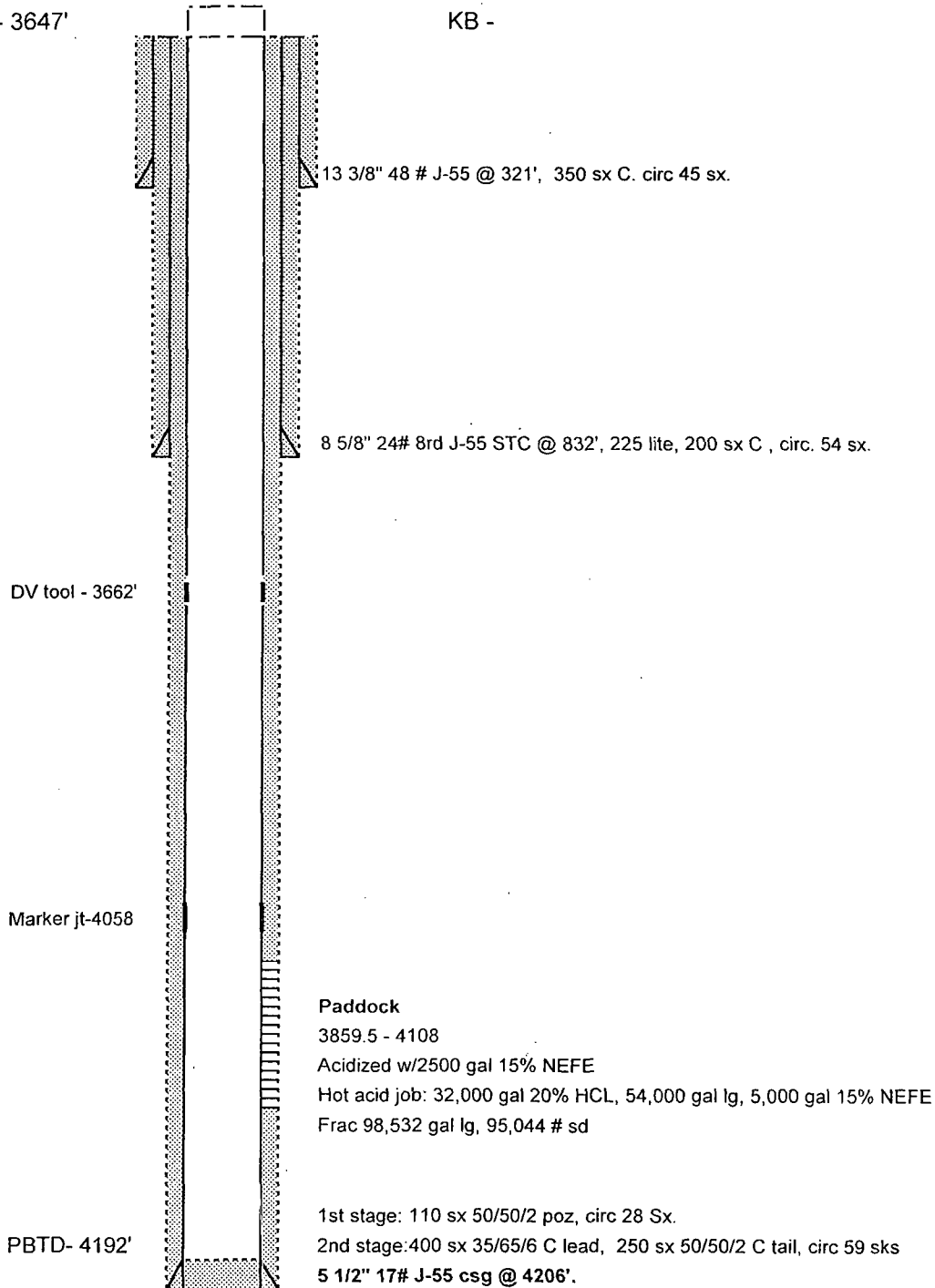
Continental A State #6
C-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 4/29/99

Elevation - 3647'

KB -





PBTD- 4351'

COG OPERATING LLC

Lease & Well # Continental A State #9

ACTIVE

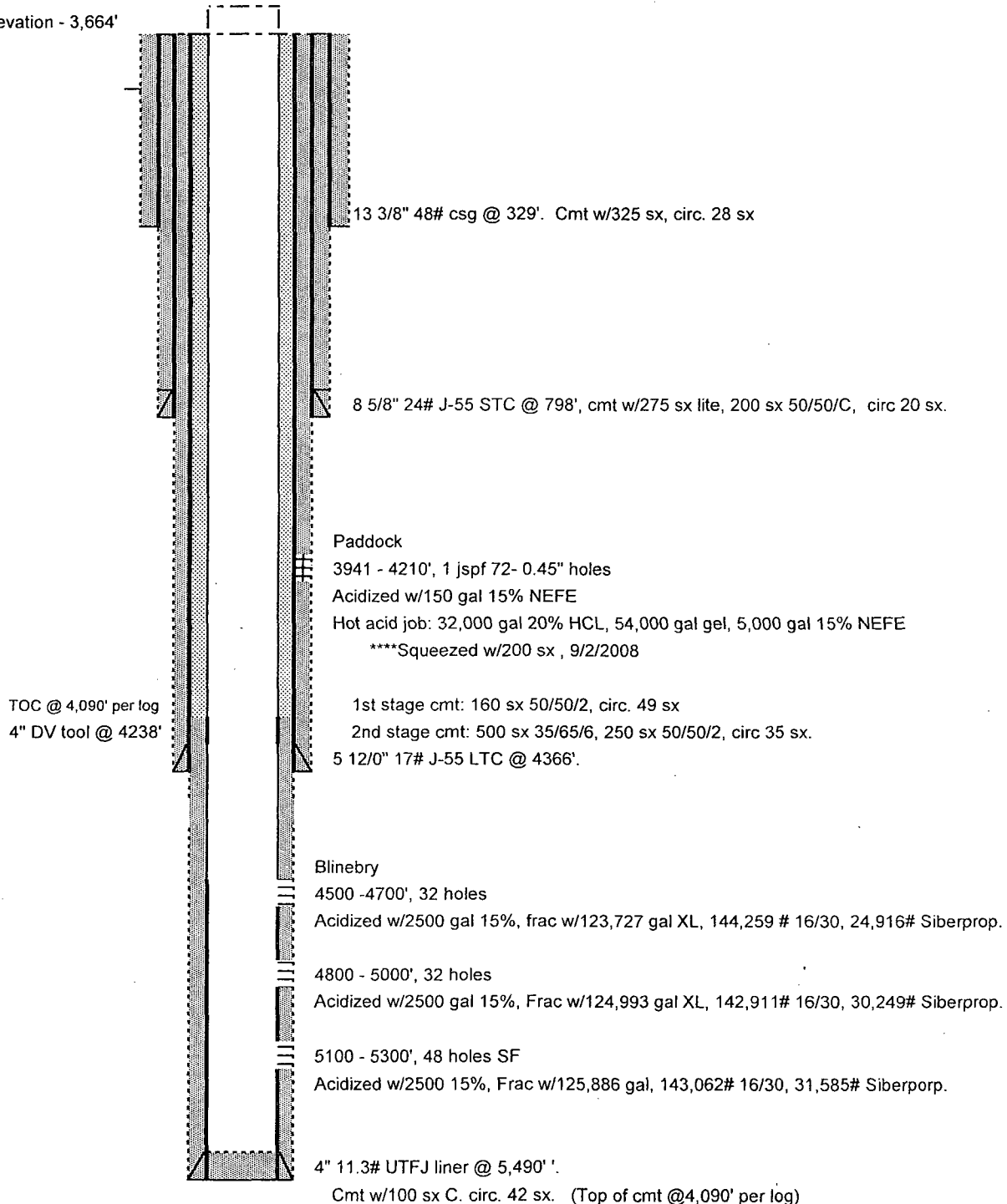
30 015 32304

Eddy County, NM

Sec 30 T17S R29E 2310 FNL 580 FWL

Spud: 5/14/2002

Elevation - 3,664'



COG Operating LLC

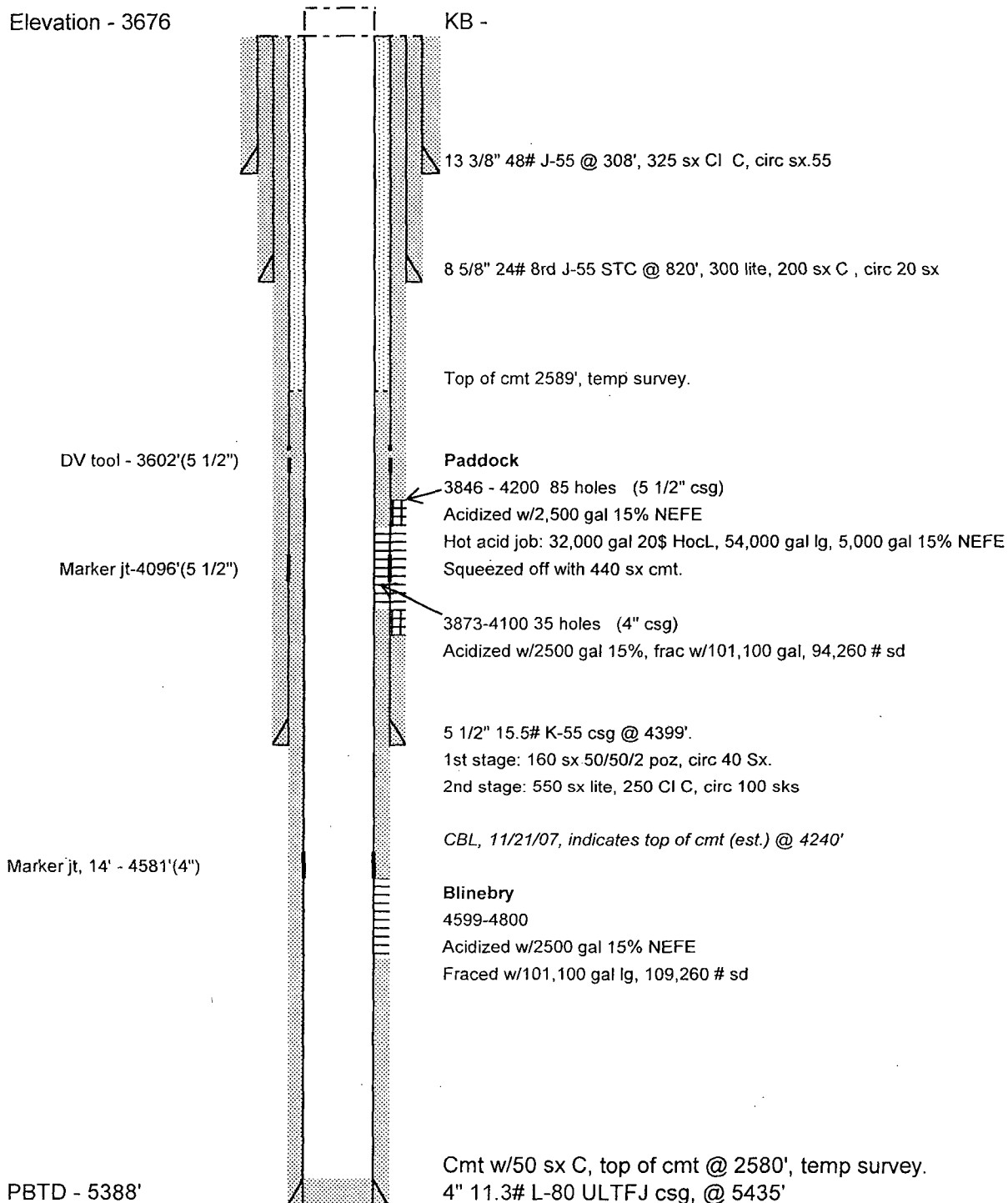
Lease & Well #
API# 30-015-32412

Continental A State # 10
D-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 11/6/07

Elevation - 3676



COG Operating LLC

Lease & Well #

Continental A State #11
30-015-34742

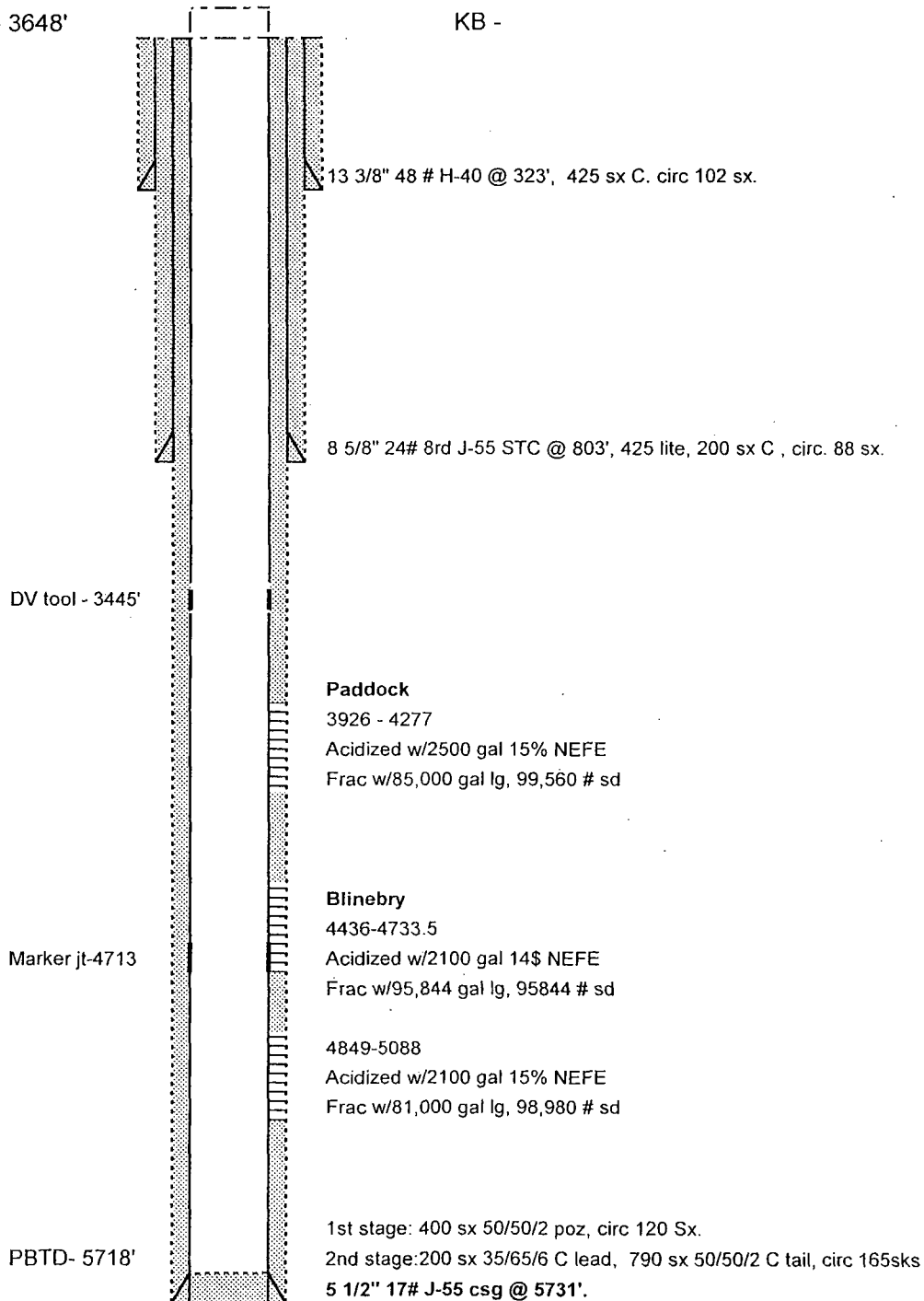
ACTIVE

SPUD- 8/14/06

Eddy County, NM
Sec 30 T17s R29E 1450' FNL & 1907" FWL

Elevation - 3648'

KB -



PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 5757
Field	: EMPIRE	Log Total Depth	:
Operator Name	: COG OPERATING LLC	True Vertical Depth	:
Lease Name	: CONTINENTAL A STATE		
Well Number	: 11	Spud Date	: AUG 14, 2006
API Number	: 30015347420000	Comp Date	: SEP 14, 2006
Regulatory API	: 3001534742		
Init Lahee Class	: D	Hole Direction	: DIRECTIONAL
Final Lahee Class	: DO	Reference Elevation	:
Permit Number	:	Ground Elevation	: 3648
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 452YESO YESO		
Oldest Age Pen	: 452 PERMIAN LEONARDIAN		
Producing Formation	: 452YESO YESO		
Township	: 17 S	Section	: 30 SEC
Range	: 29 E	Spot	: NW SE NW
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 1450 FNL 1907 FWL CONGRESS SECTION		
Latitude	: 32.8088300	Latitude (Bot)	: 32.8082800
Longitude	: -104.1148100	Longitude (Bot)	: -104.1148300
/Long. Source	: TS		
ion 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	4436	5088		679	41.4	PERF	PUMPING

IP Volume												
Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	140	BPD					95	MCFD		304	BBL	

IP Treatment												
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	4840	5088	2100	GAL					ACID			
001	4840	5088	81000	GAL	98980	LB			FRAC		SAND	
001	4436	4733	2100	GAL					ACID			
001	4436	4733	95844	GAL	98645	LB			FRAC		SAND	

IP Perforation											
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per	
001	4436	4733		PERF	452YESO	452YESO		54			
001	4840	5088		PERF	452YESO	452YESO		74			

Formations

Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453JEN	QUEEN	1640				LOG	
453GRBG	GRAYBURG	2050				LOG	
453SADR	SAN ANDRES	2363				LOG	
453GLRT	GLORIETA	3816				LOG	

COG Operating LLC

Lease & Well #
API# 30-015-35052

Continental A State #12

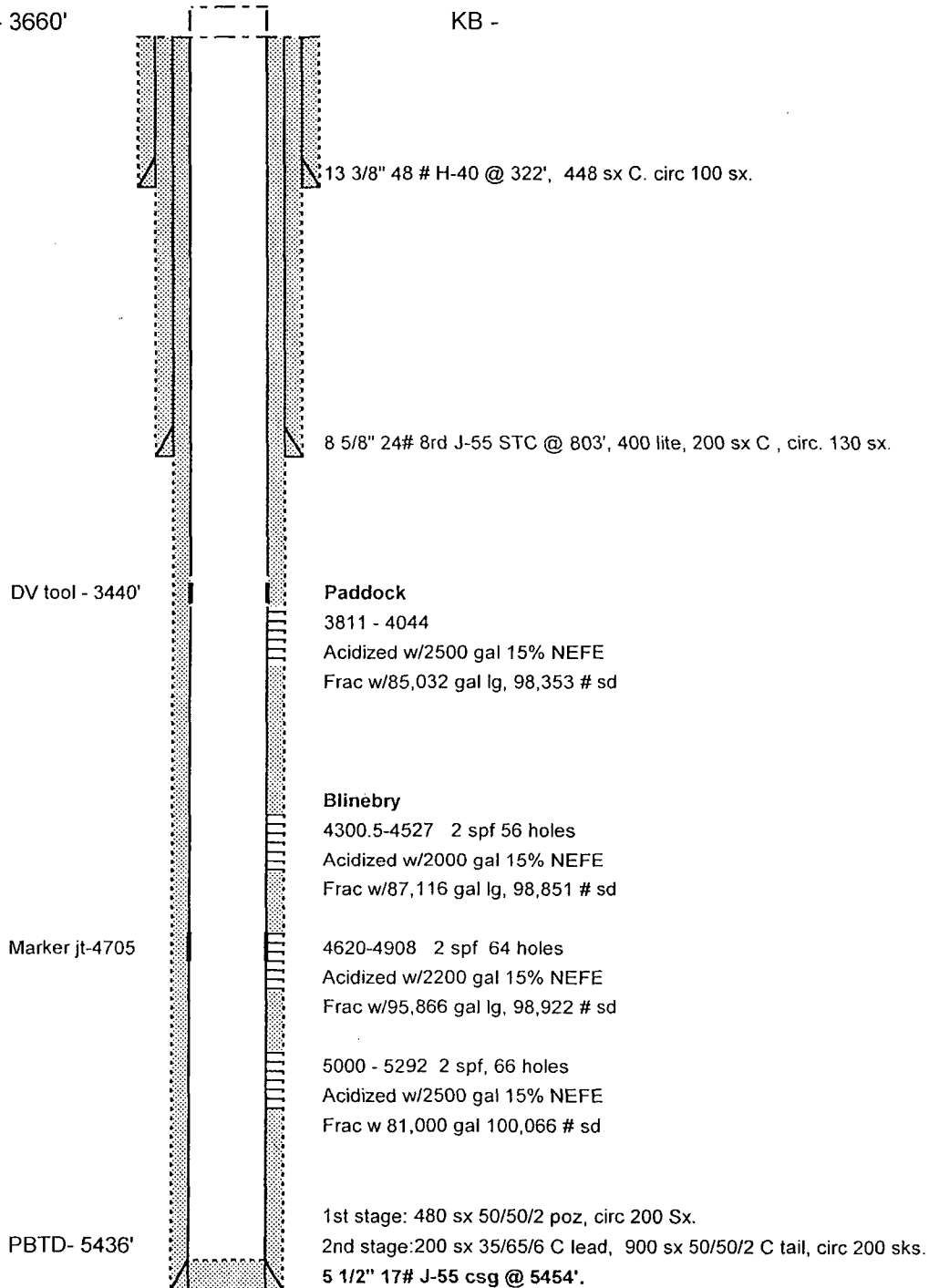
ACTIVE

SPUD- 9/24/06

Eddy County, NM
Sec 30, T17s, R29E, 330' FNL, 583' FWL

Elevation - 3660'

KB -



P/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	5460
Field	:	EMPIRE	Log Total Depth	:	
Operator Name	:	COG OPERATING LLC	True Vertical Depth	:	
Lease Name	:	CONTINENTAL A STATE			
Well Number	:	12	Spud Date	:	SEP 25, 2006
API Number	:	30015350520000	Comp Date	:	NOV 05, 2006
Regulatory API	:	3001535052			
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	
Permit Number	:		Ground Elevation	:	3660
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	452YESO YESO			
Oldest Age Pen	:	452 PERMIAN LEONARDIAN			
Producing Formation	:	452YESO YESO			
Township	:	17 S	Section	:	30 SEC
Range	:	29 E	Spot	:	NW NW NW
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	330 FNL 583 FWL CONGRESS SECTION
Latitude	:	32.8119200
Longitude	:	-104.1191100
Long. Source	:	TS
Location Narrative	:	Type
		SCALED FOOT
		IRREG_SECT
		Remark
		REGULATORY
		N

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	452YESO	452YESO	4301	5293		1525	41.4	PERF	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	61	BPD					93	MCFD			323	BBL

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	4301	4527	2000	GAL					ACID			
001	4301	4527	89616	GAL	98851	LB			FRAC		SAND	
001	4620	4908	2200	GAL					ACID			
001	4620	4908	95886	GAL	98922	LB			FRAC		SAND	
001	5001	5293	2500	GAL					ACID			
001	5001	5293	81000	GAL	100066	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	4301	4527		PERF	452YESO	452YESO		56		
001	4620	4908		PERF	452YESO	452YESO		64		
001	5001	5293		PERF	452YESO	452YESO		66		

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453QUEN	QUEEN	1588				LOG	

PI/Dwights PLUS on CD Well Summary Report

453GRBG	GRAYBURG	1989	LOG
453SADR	SAN ANDRES	2282	LOG
453GLRT	GLORIETA	3697	LOG
452YESO	YESO	3794	LOG

Log Data

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

Casing Data

Size	Base Depth	Cement	Unit
13 3/8 IN	322	448	SACK
8 5/8 IN	805	600	SACK
5 1/2 IN	5454	1580	SACK

COG Operating LLC

Lease & Well #
API# 30-015-35946

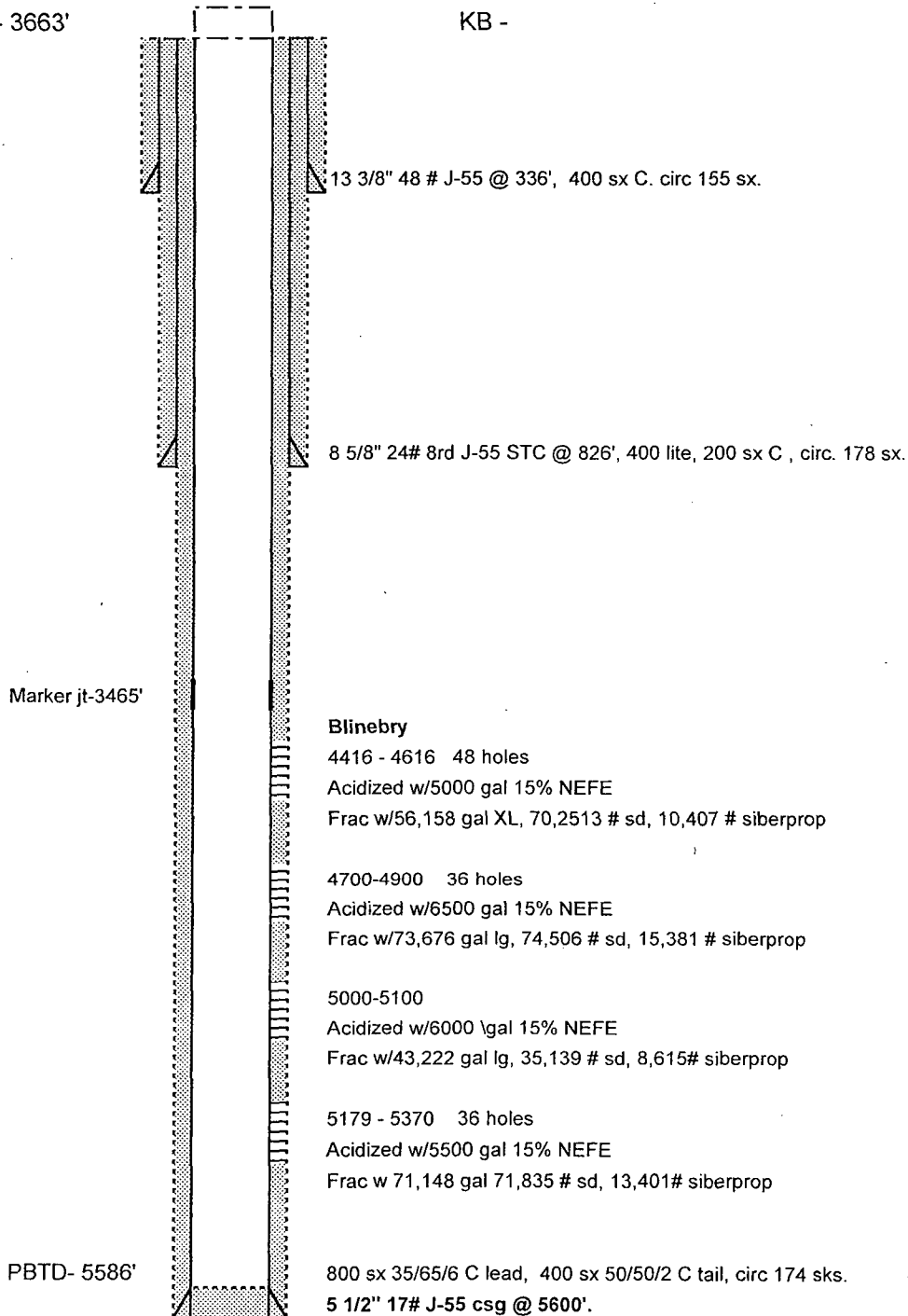
Continental A State #13
E-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 1/12/08

Elevation - 3663'

KB -



COG OPERATING LLC

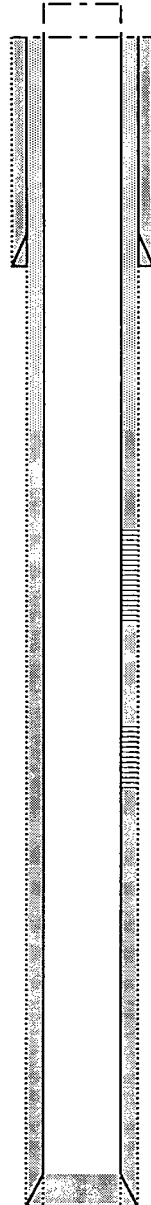
Lease & Well #
APE # 30-015-10319
Spud - 1/28/65

Continental B State #3

Active

990 FSL & 1375 FWL
Sec 30 N T 19S R 29E
Eddy Co., NM
KB -

Elevation - 3652'



8 5/8" 24# @ 448', 50 sx cmt.

Top of cmt calc @ 1,912'. (20% loss)

Grayburg

2285-2403

Frac w/22,050 gal oil, 11,000 # sd

San Andres

2440-2450

Frac w/34,000 gal oil, 30,000 # sd

PBTD-2493'

5 1/2" 14 # csg @ 2512', cmt w/100 sx C

COG Operating LLC

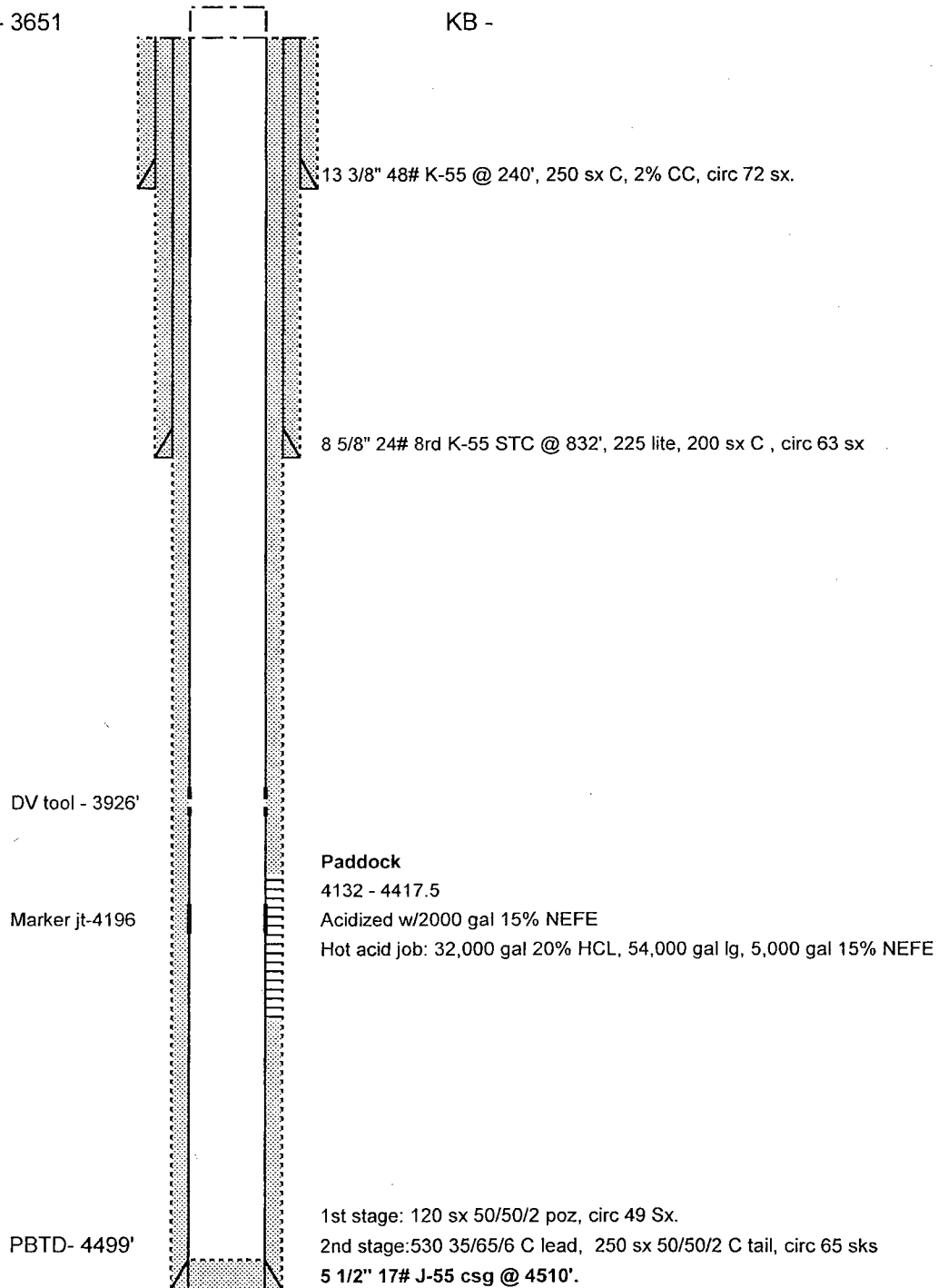
Lease & Well # Continental B State #4
API# 301-015-30517 N-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 7/23/00

Elevation - 3651

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35239

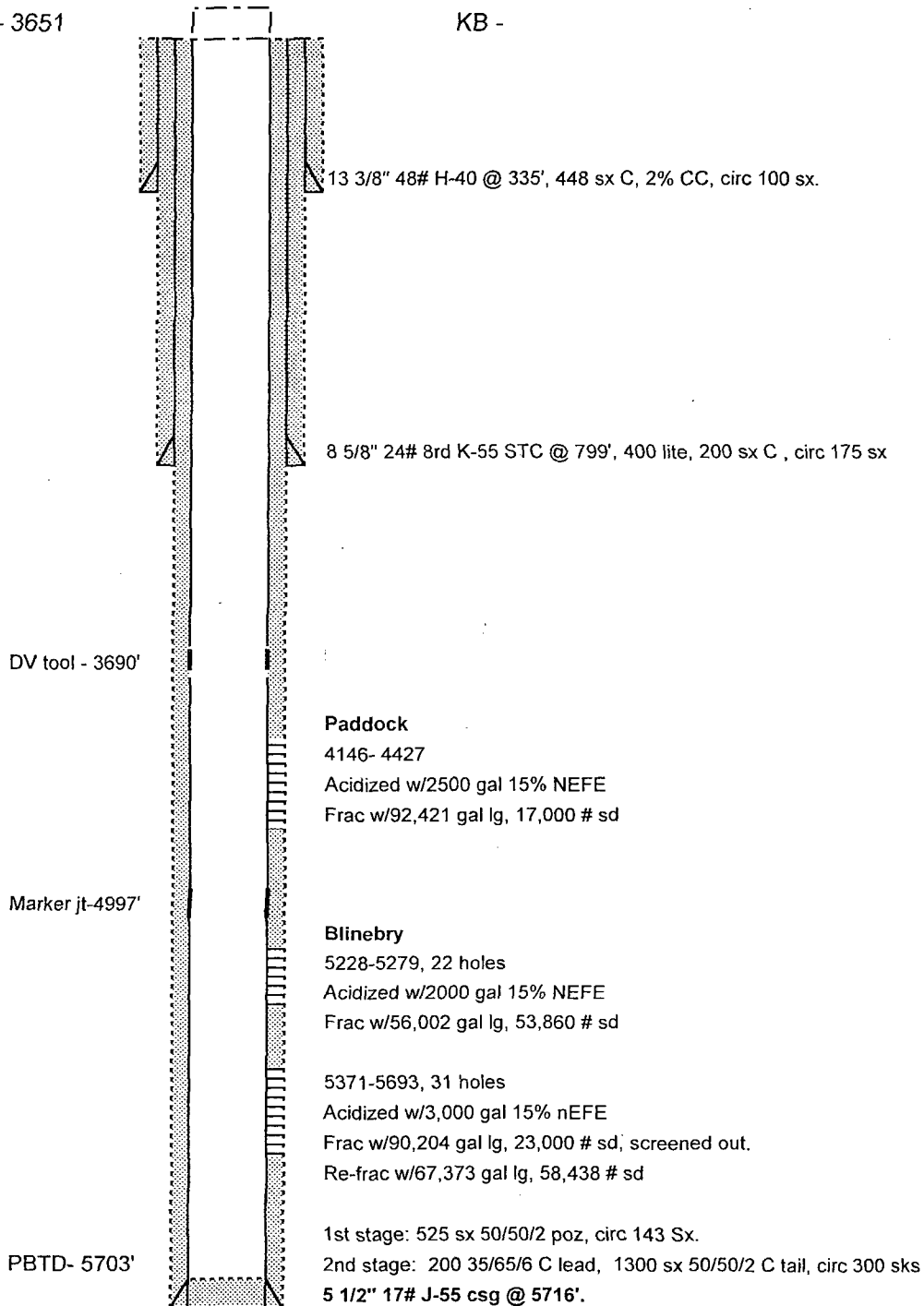
Continental B State #7
N-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 5/1/07

Elevation - 3651

KB -



COG Operating LLC

Lease & Well #
30-015-30358

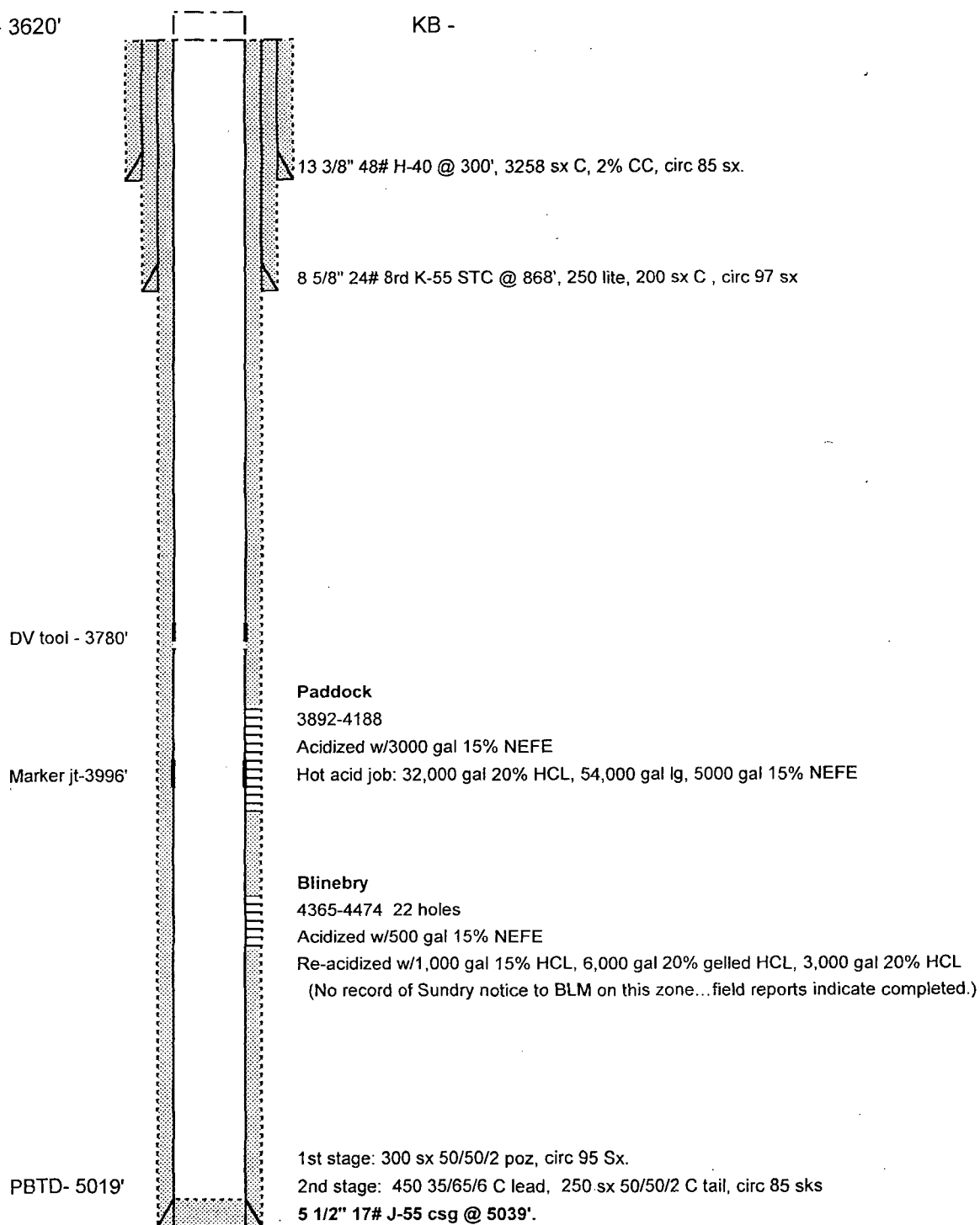
Gold Star Federal #1
A-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 12/5/98

Elevation - 3620'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30305

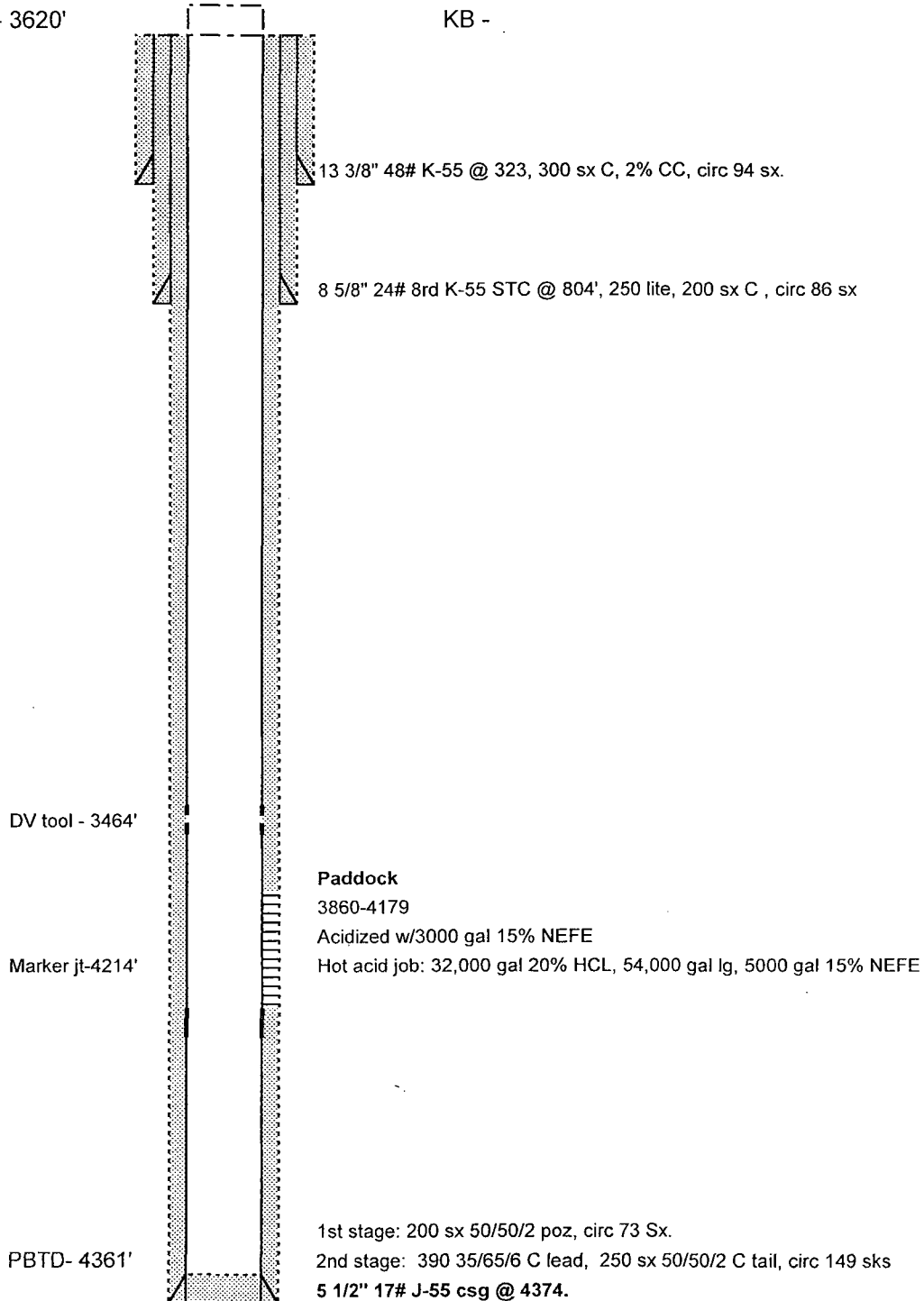
Gold Star Federal #2
B-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 1/1/99

Elevation - 3620'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30469

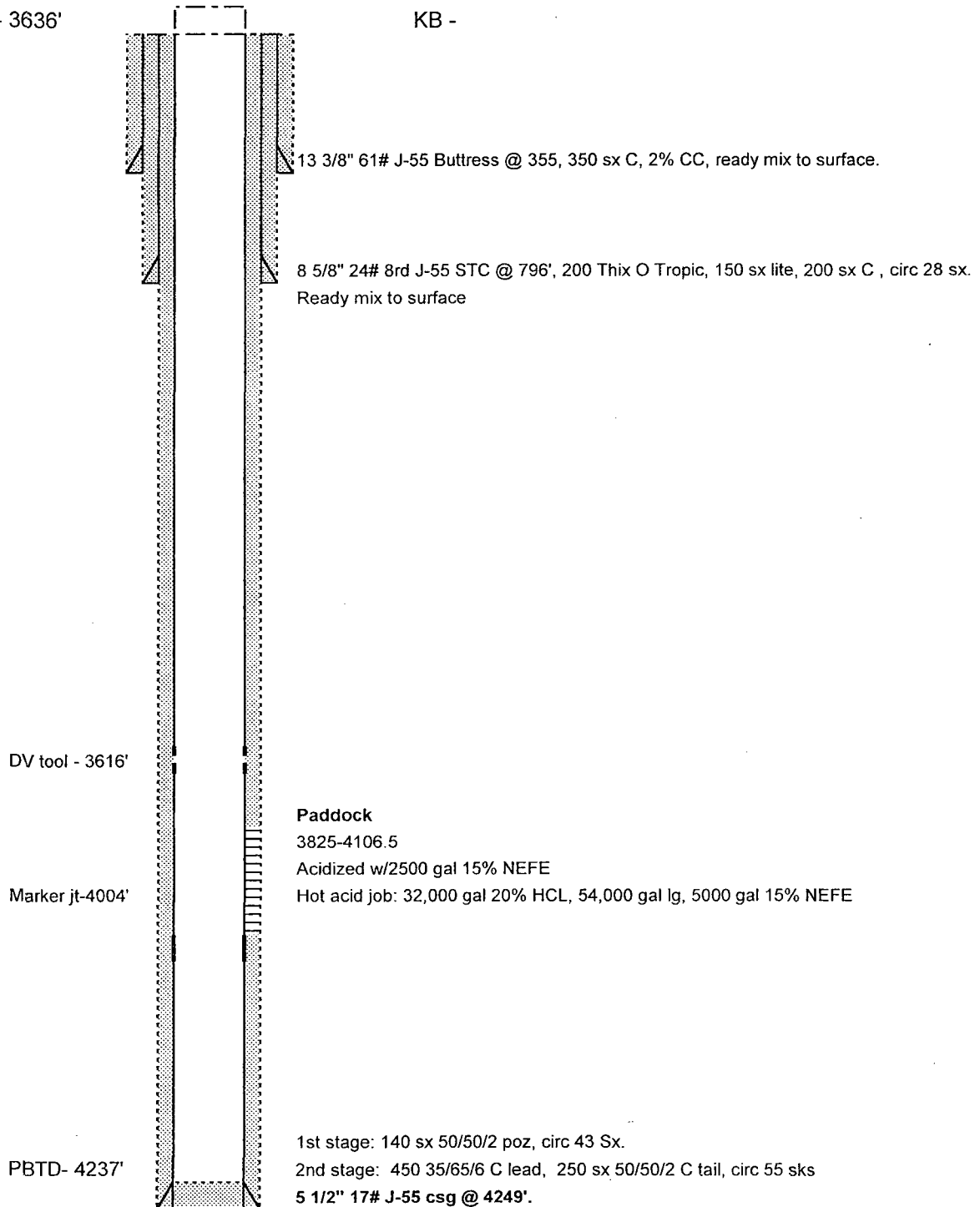
Gold Star Federal #3
B-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 12/30/99

Elevation - 3636'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30309

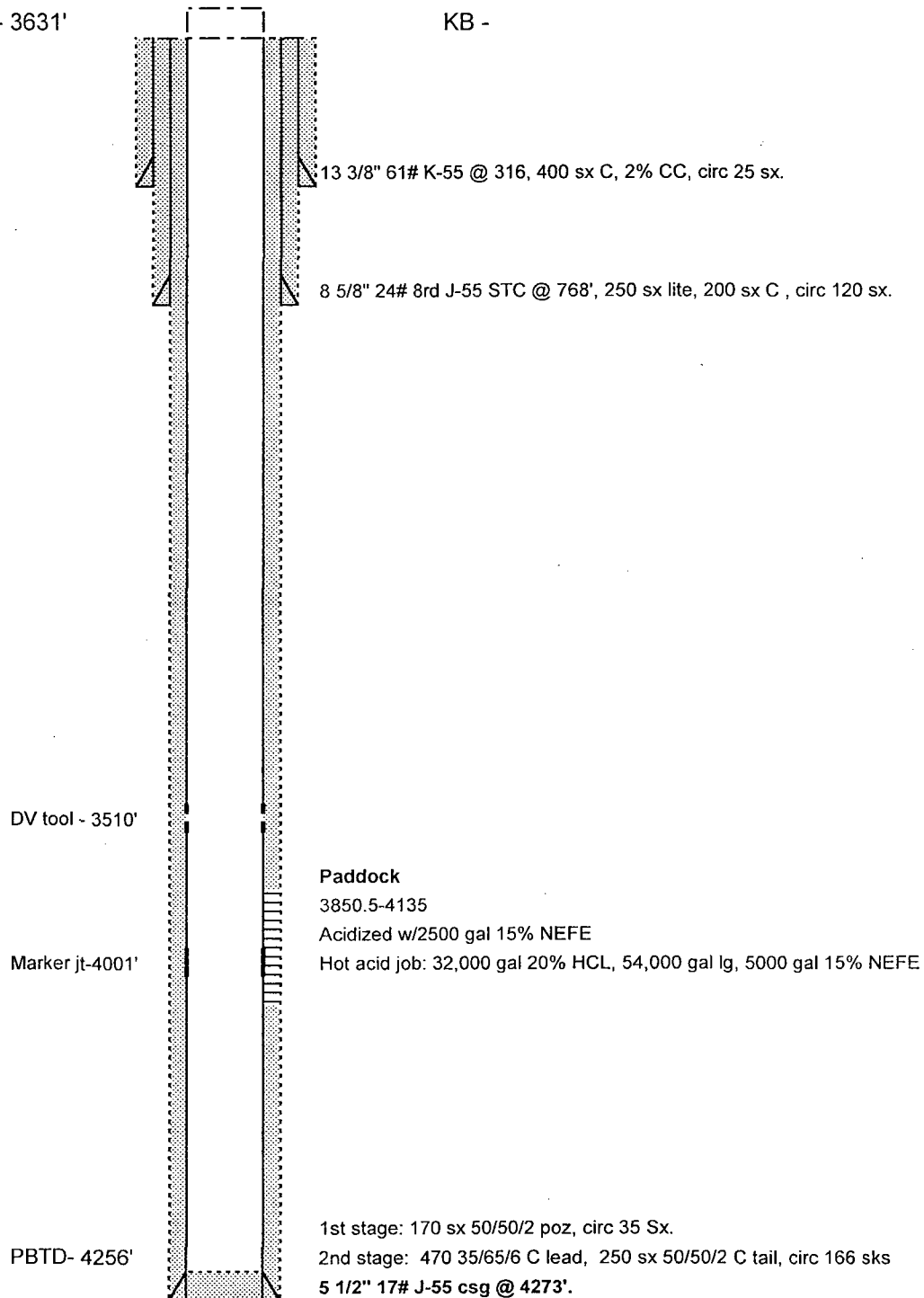
Gold Star Federal #4
A-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/17/99

Elevation - 3631'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-31703

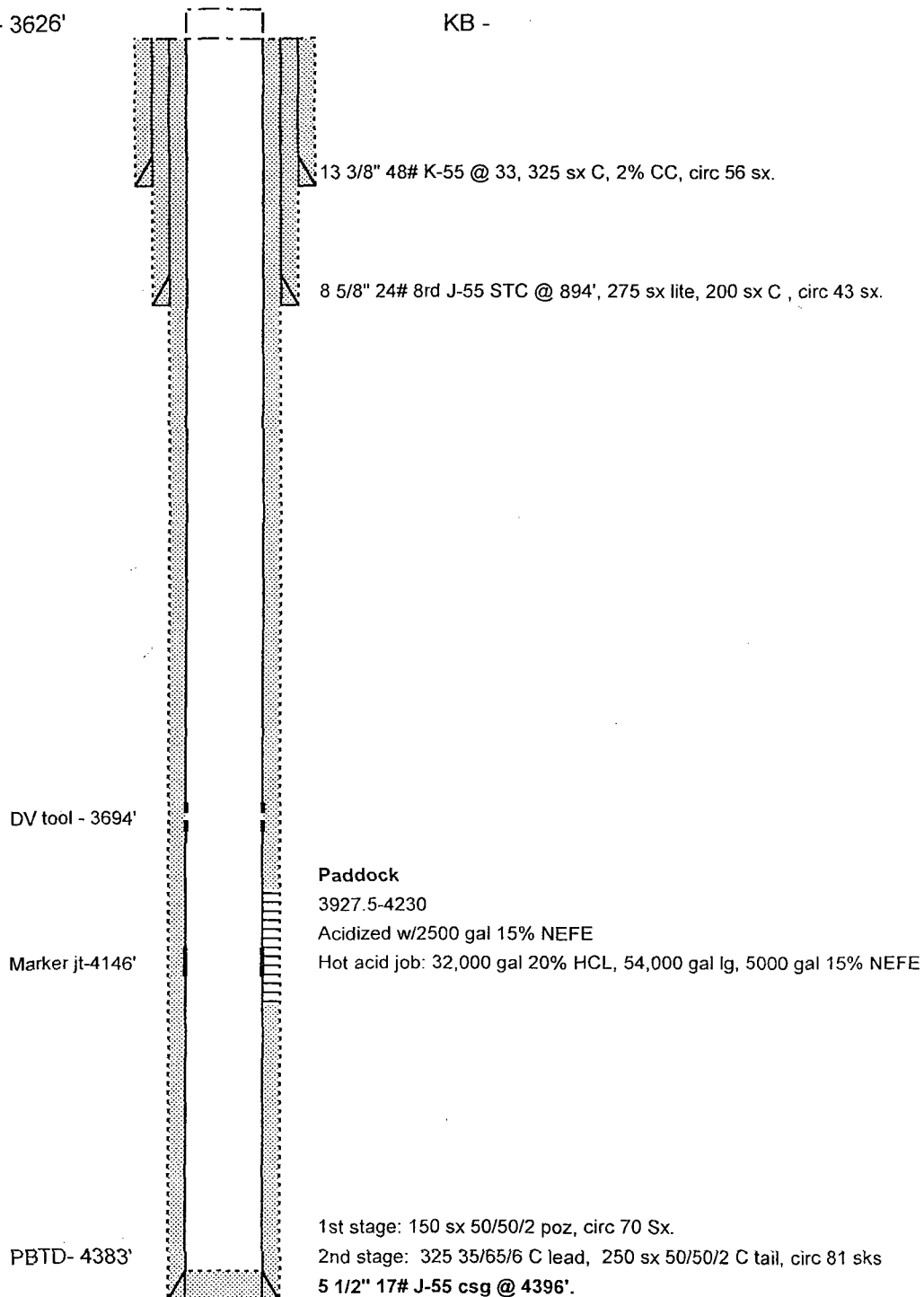
Gold Star Federal #5
A-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/8/01

Elevation - 3626'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-32285

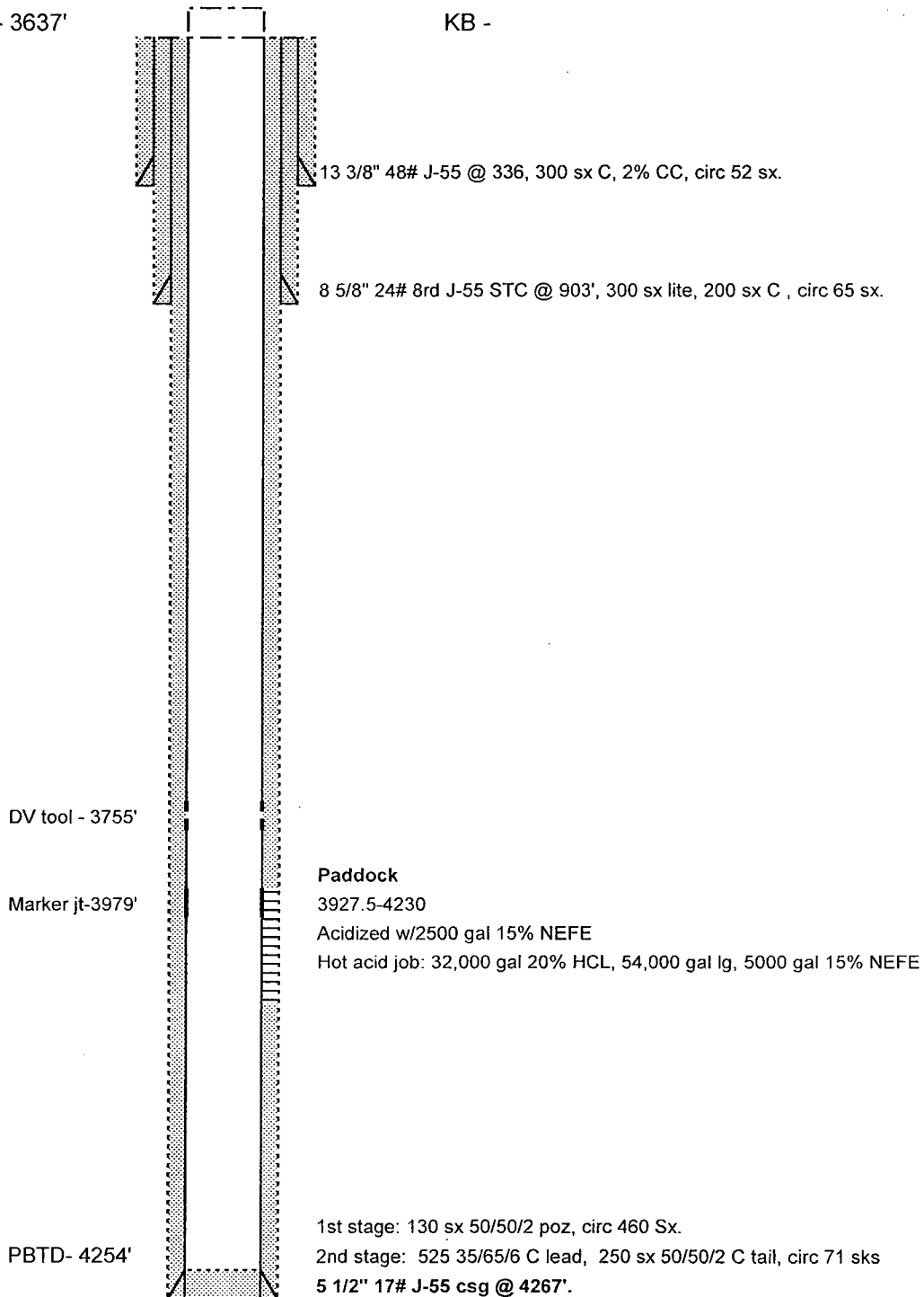
Gold Star Federal #6
A-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/22/02

Elevation - 3637'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35691

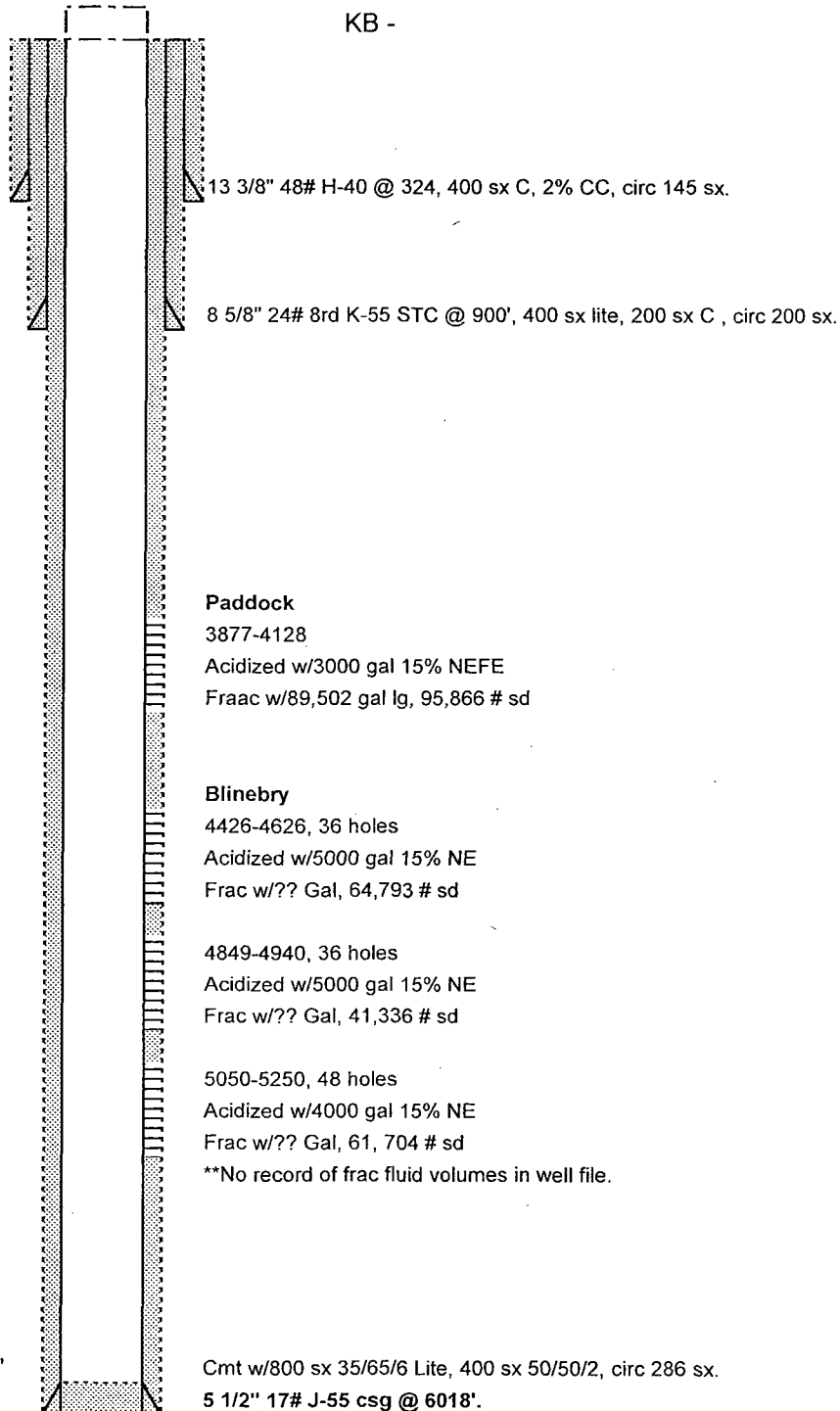
Gold Star Federal #7
B-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 10/5/07

Elevation - 3638'

KB -



COG Operating LLC

ACTIVE



Lease & Well #
30-015-32062

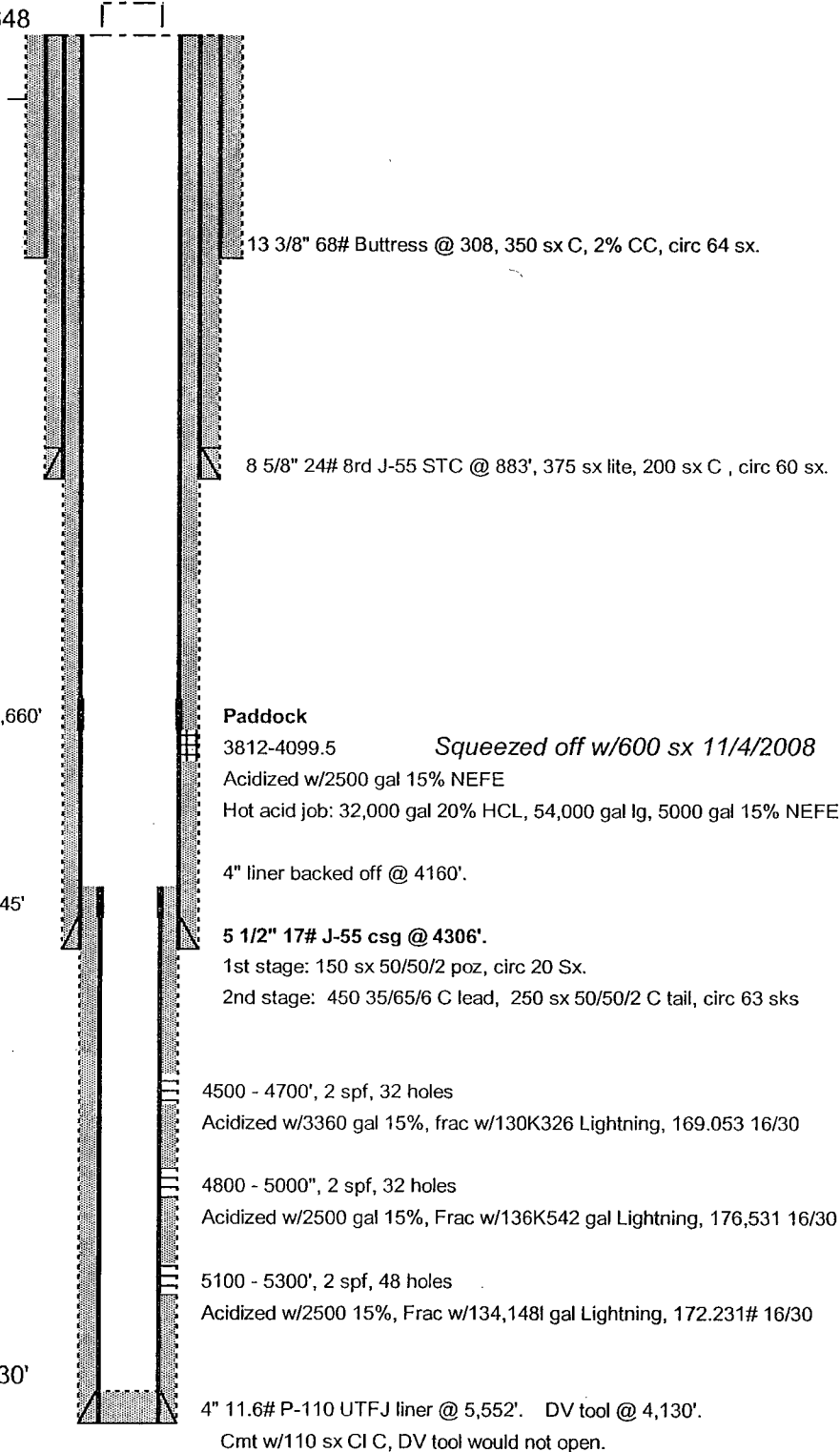
Gold Star Federal #8

Eddy County, NM

Sec 30 T17S R29E 990 FNL 2310 FEL

SPUD- 12/19/2002

Elevation - 3648



5 1/2" DV tool @ 3,660'

4" DV tool @ 4145'

PBTD - 5,530'



COG Operating LLC

Lease & Well #
API # 30-015-30575

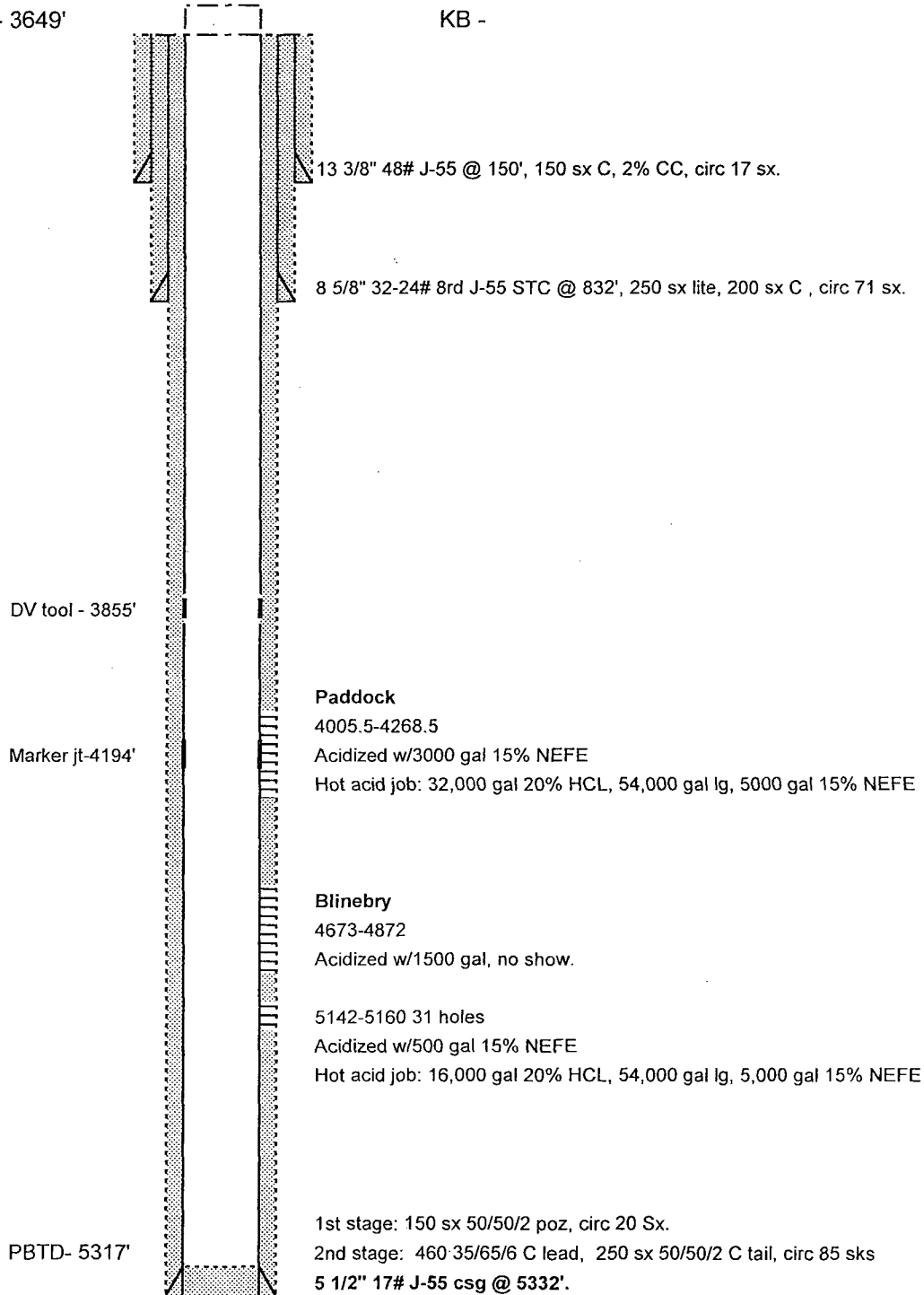
Mimosa State #1

Active
Sec 20 K T 17S R 29E
Eddy Co., NM

SPUD- 2/24/99

Elevation - 3649'

KB -



COG Operating LLC

Lease & Well #
API # 30-015-30626

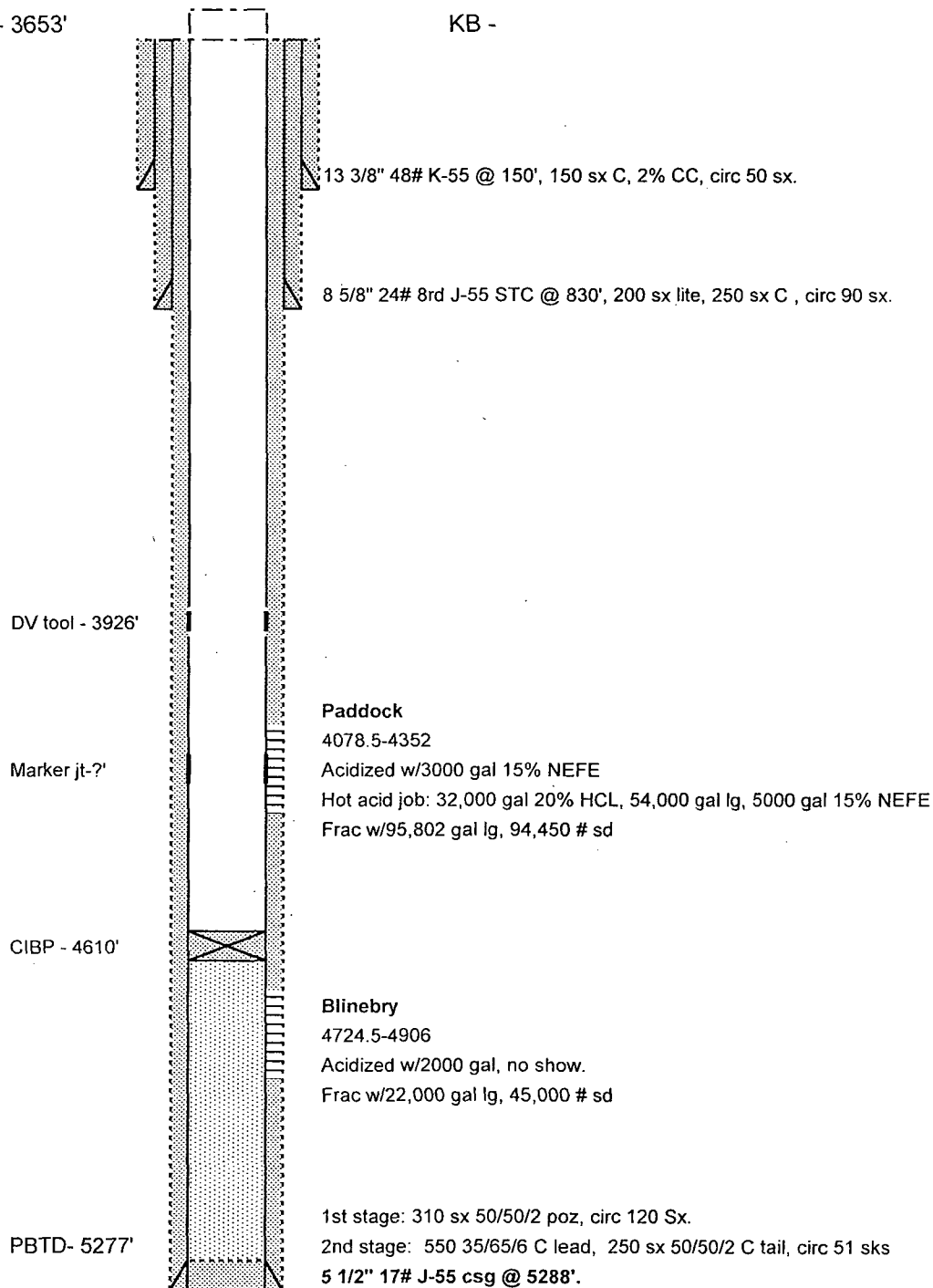
Mimosa State #2

Active
Sec 20 K T 17S R 29E
Eddy Co., NM

SPUD- 4/16/99

Elevation - 3653'

KB -



COG Operating LLC

Lease & Well #
API # 30-015-33006

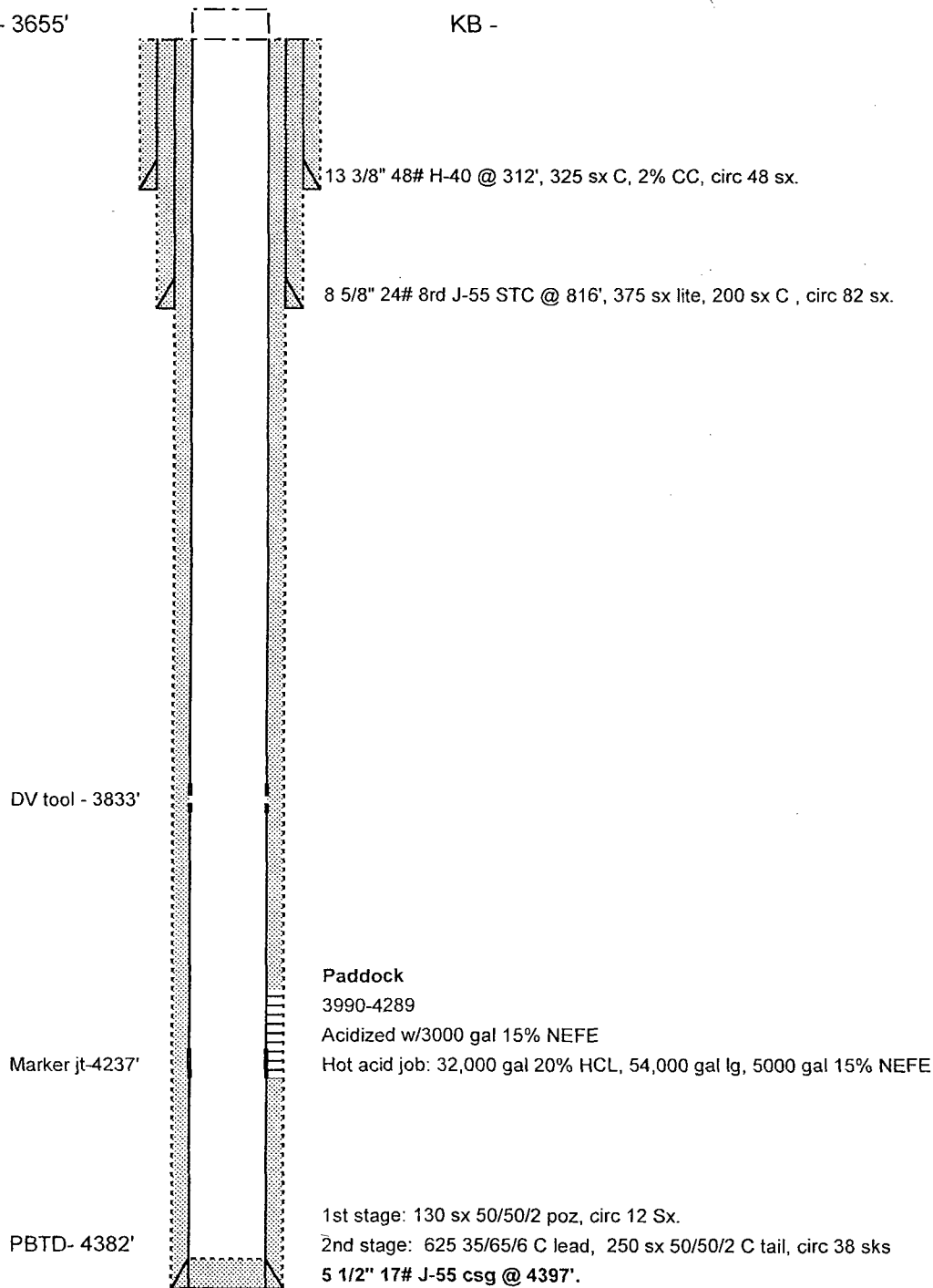
Mimosa State #3

Sec 20 K T 17S R 29E
Eddy Co., NM

SPUD- 10/9/03

Elevation - 3655'

KB -



COG Operating, LLC

Lease & Well # Mimosa State #4

ACTIVE

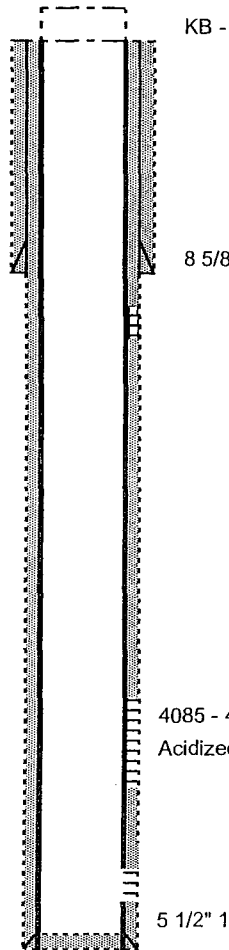
30 015 34691

Lea Co., NM

Spud - 12/16/2007

Sec 11, T17S, R33E, 660 FSL & 330 FEL

Elevation - 3647' GR



KB -

8 5/8" 32# STC J-55 @ 346', c/w 400 sx, circ. 205 sx.

4085 - 4345', 33 holes

Acidized w/??, Frac w/58,632 gal gel, 46,687# sd.

PBTD- 4599'

5 1/2" 17# LTC J-55 @ 4,616', C/w 800 sx lead, 400 sx tail, circ cmt.

Circ 105 sx

COG Operating LLC

Lease & Well #
API# 30-015-30839

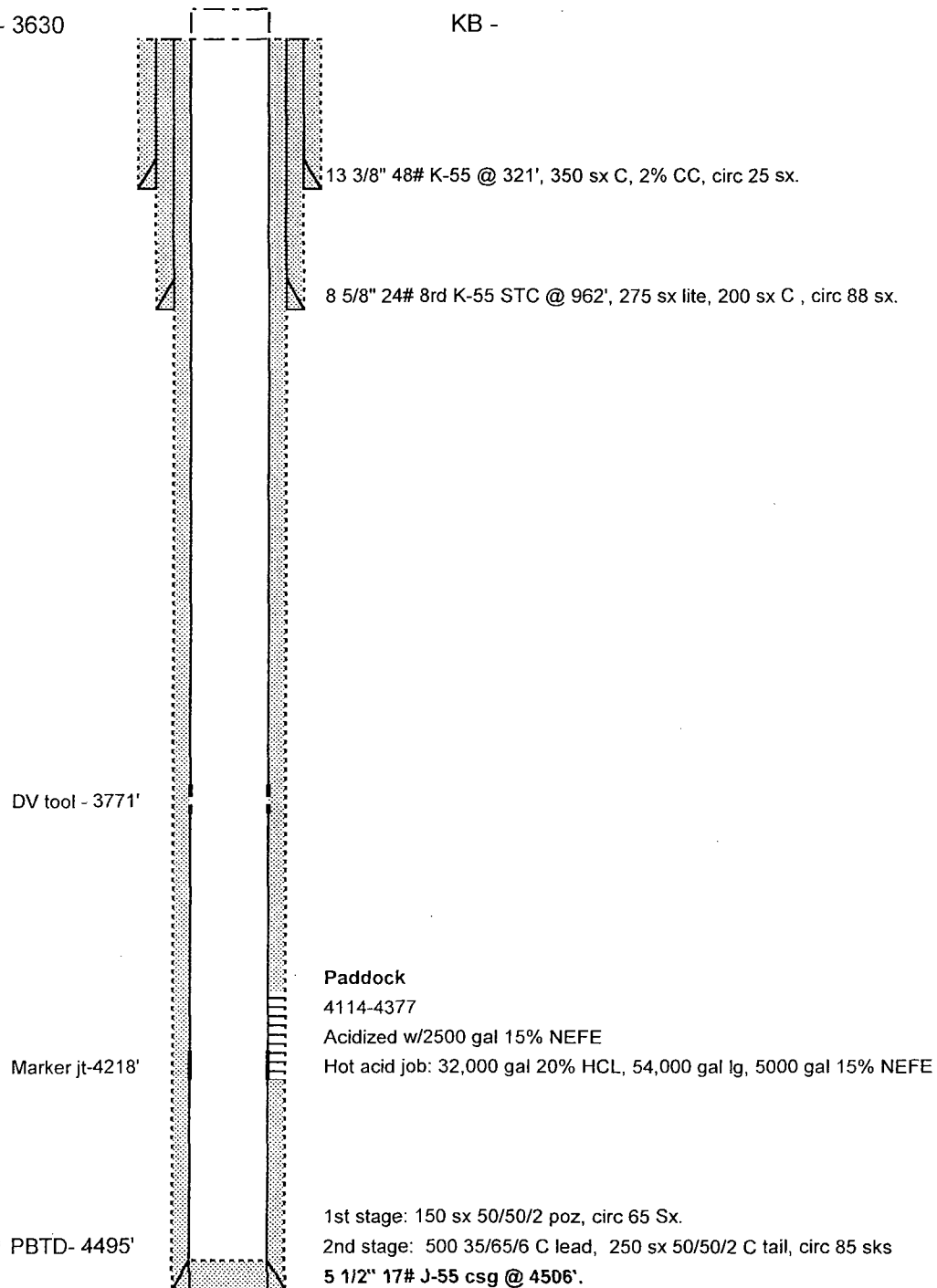
Navaho Federal #2
J-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 4/19/00

Elevation - 3630

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30840

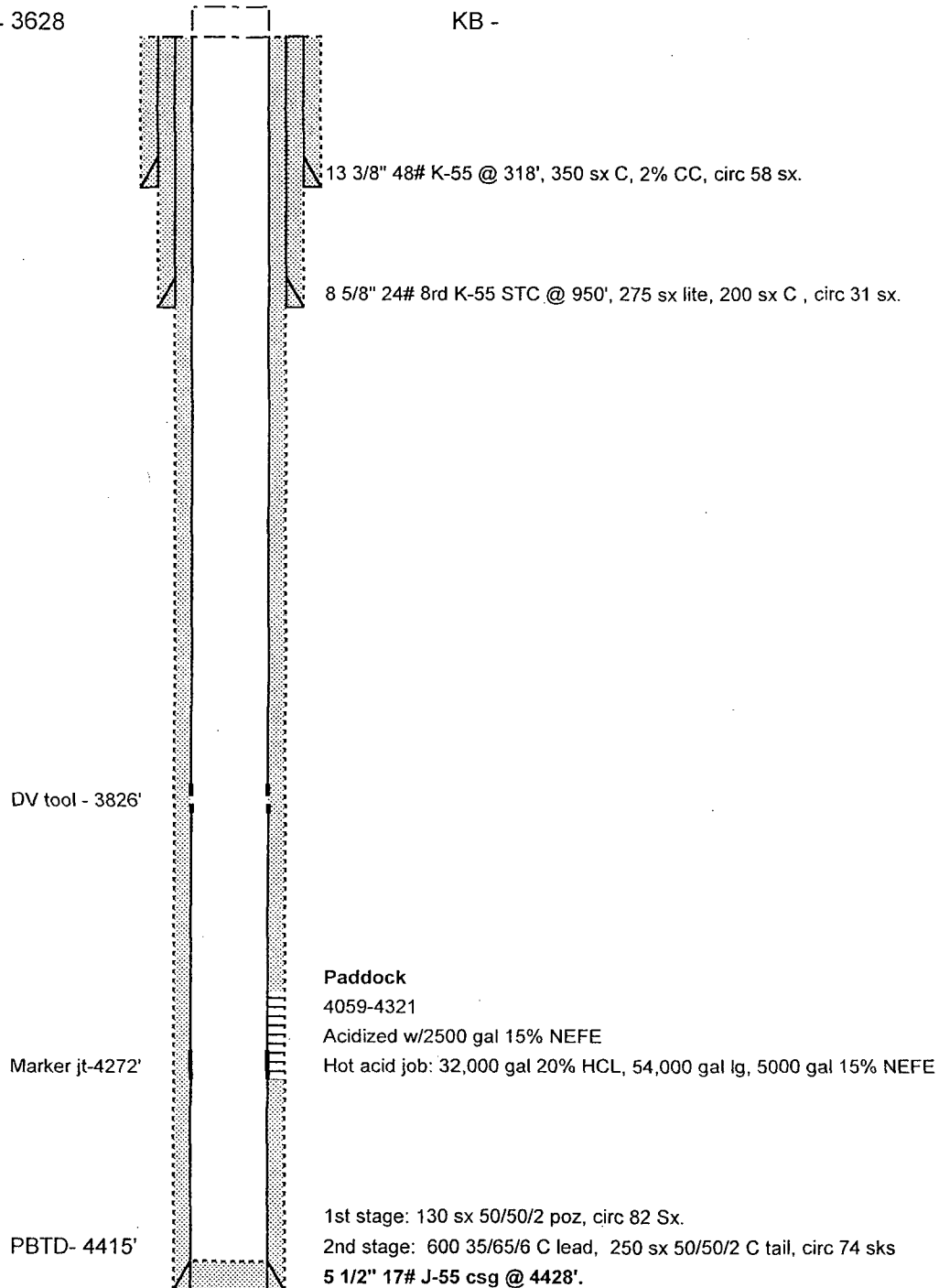
Navaho Federal #3
I-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 5/14/00

Elevation - 3628

KB -



COG Operating LLC

Lease & Well #
API# 30-015-31094

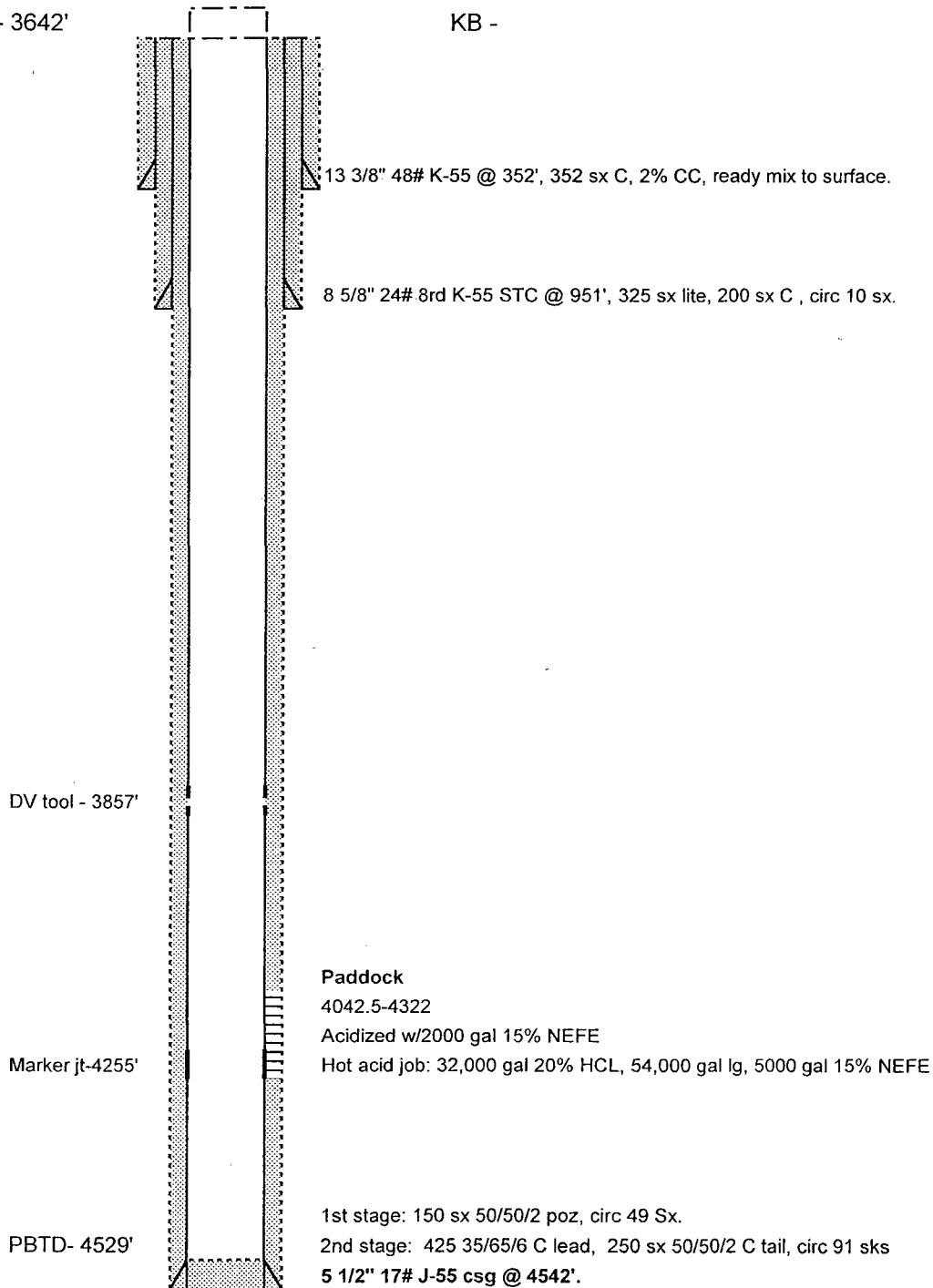
Navaho Federal #4
J-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 6/4/00

Elevation - 3642'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-32370

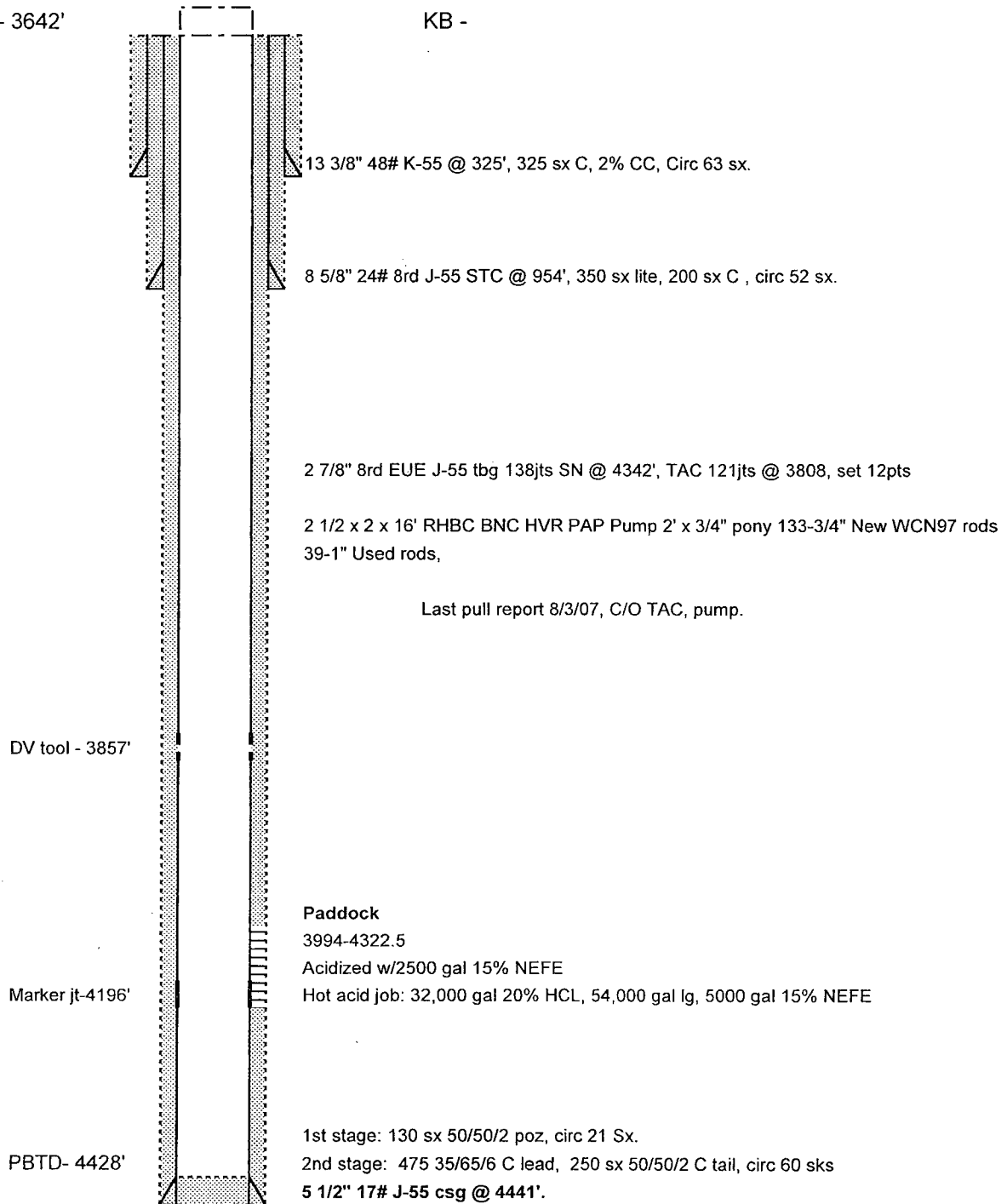
Navaho Federal #5
I-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 8/10/02

Elevation - 3642'

KB -



COG Operating LLC

Lease & Well #
API# 30-015-32378

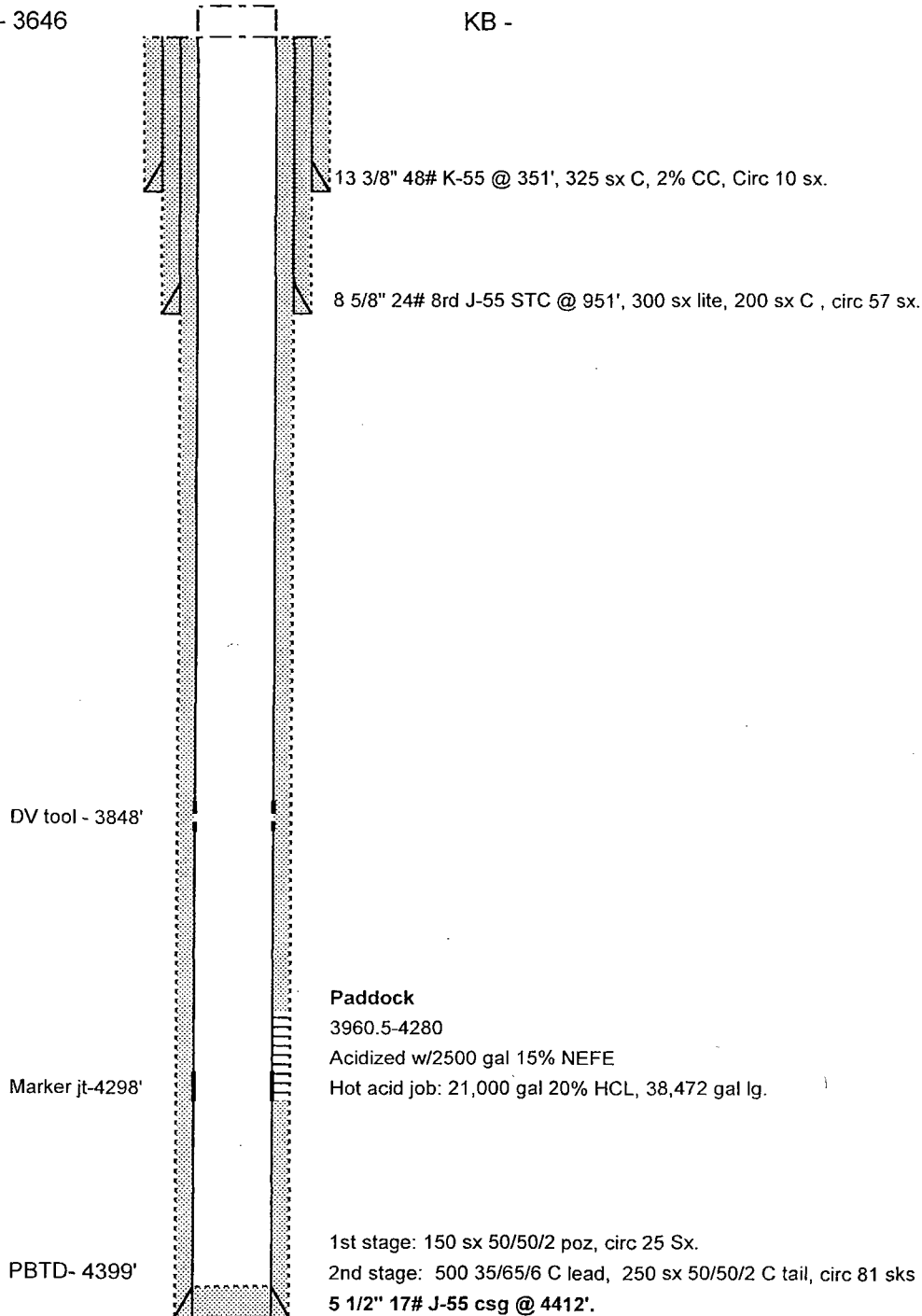
Navaho Federal #6
J-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 11/15/02

Elevation - 3646

KB -



COG Operating LLC

Lease & Well #
API# 30-015-34771

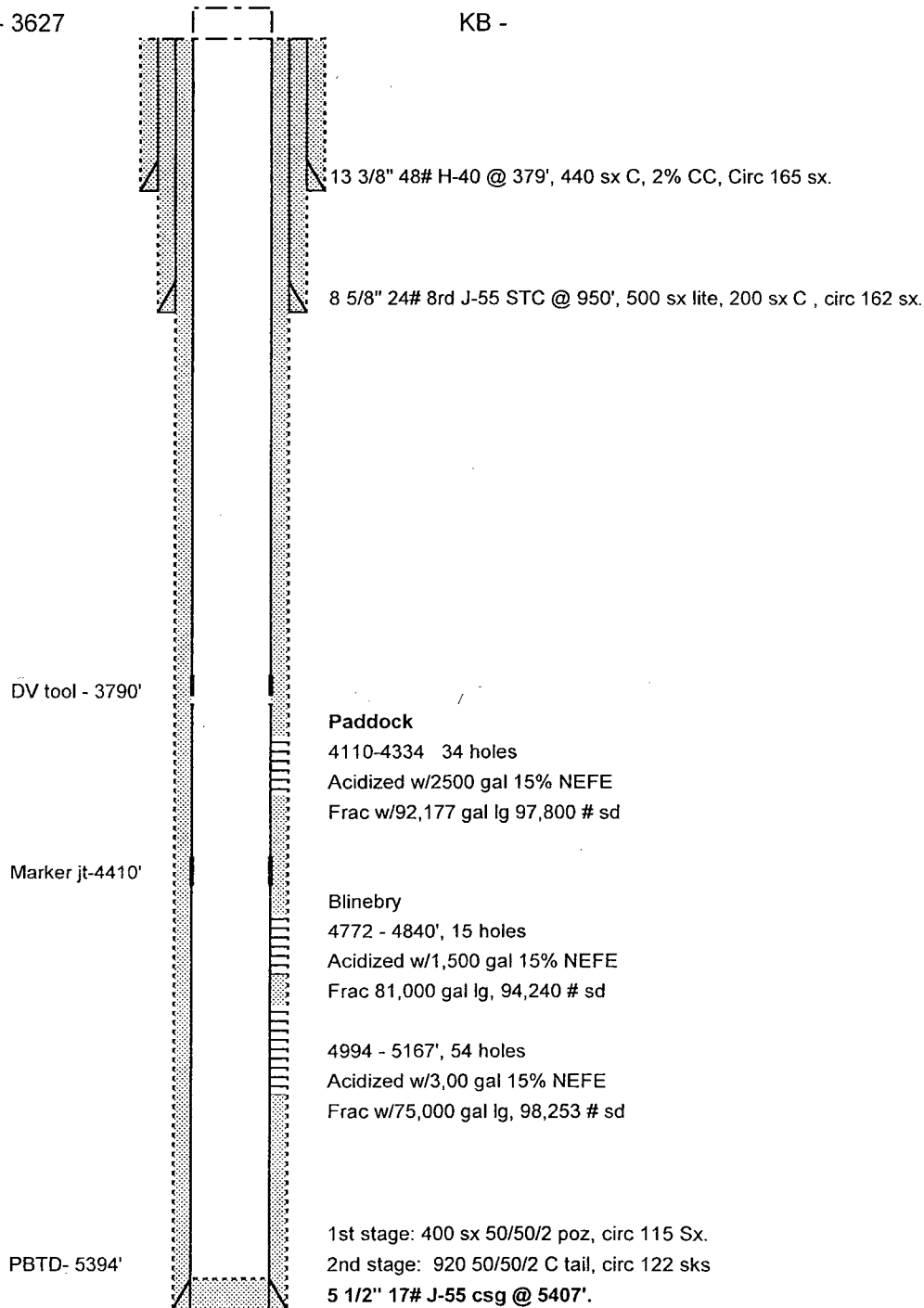
Navaho Federal #7
I-30-017S-29E

ACTIVE
EDDY CO., NM

SPUD- 7/5/06

Elevation - 3627

KB -



COG Operating LLC

Lease & Well #
API# 30-015-35014

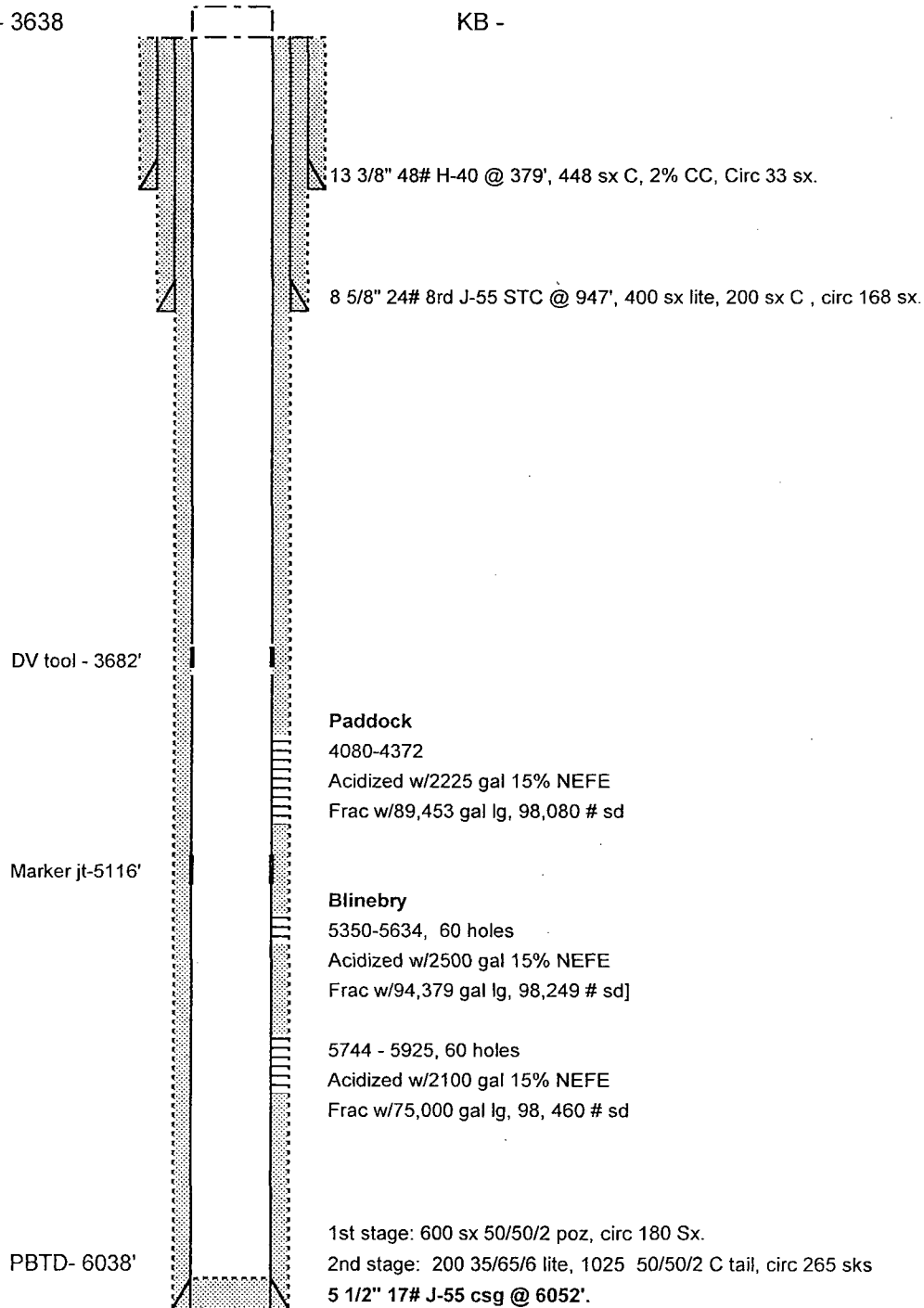
Navaho Federal #8
J-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 12/20/06

Elevation - 3638

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30032

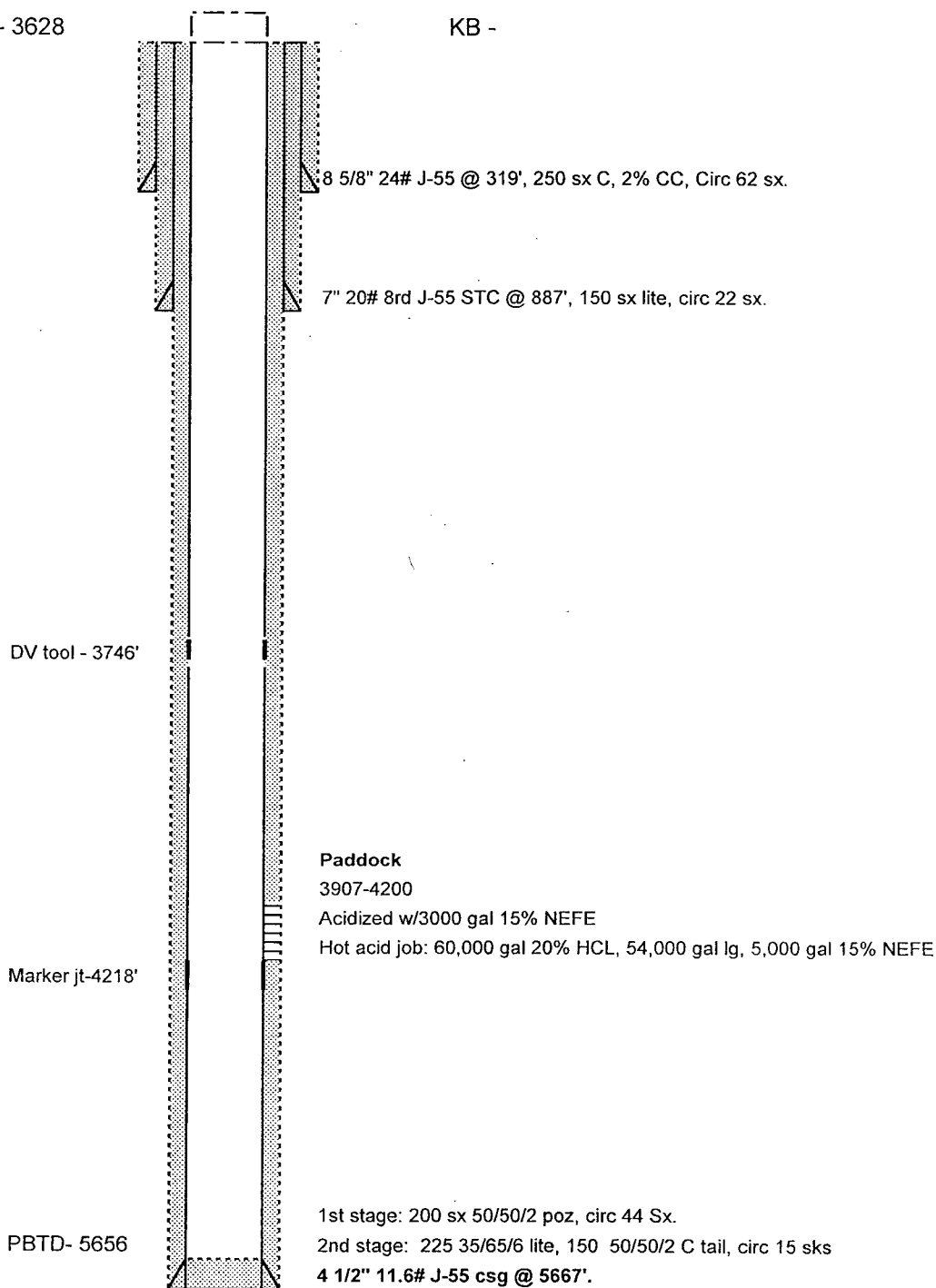
Western Federal #1
H-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD- 12/20/06

Elevation - 3628

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30310

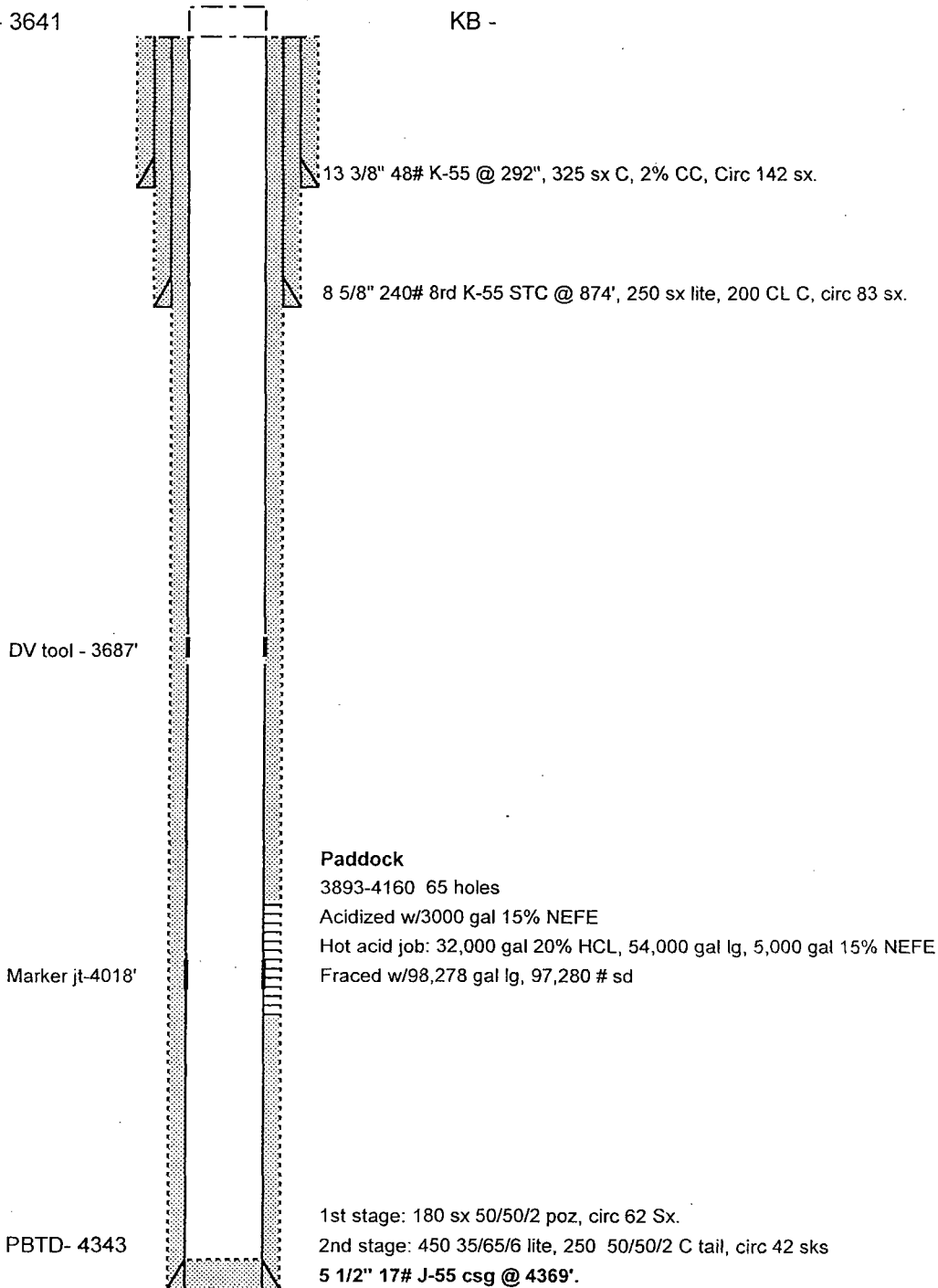
Western Federal #2
G-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD - 10/12/98

Elevation - 3641

KB -



COG Operating LLC

Lease & Well #
API# 30-015-30357

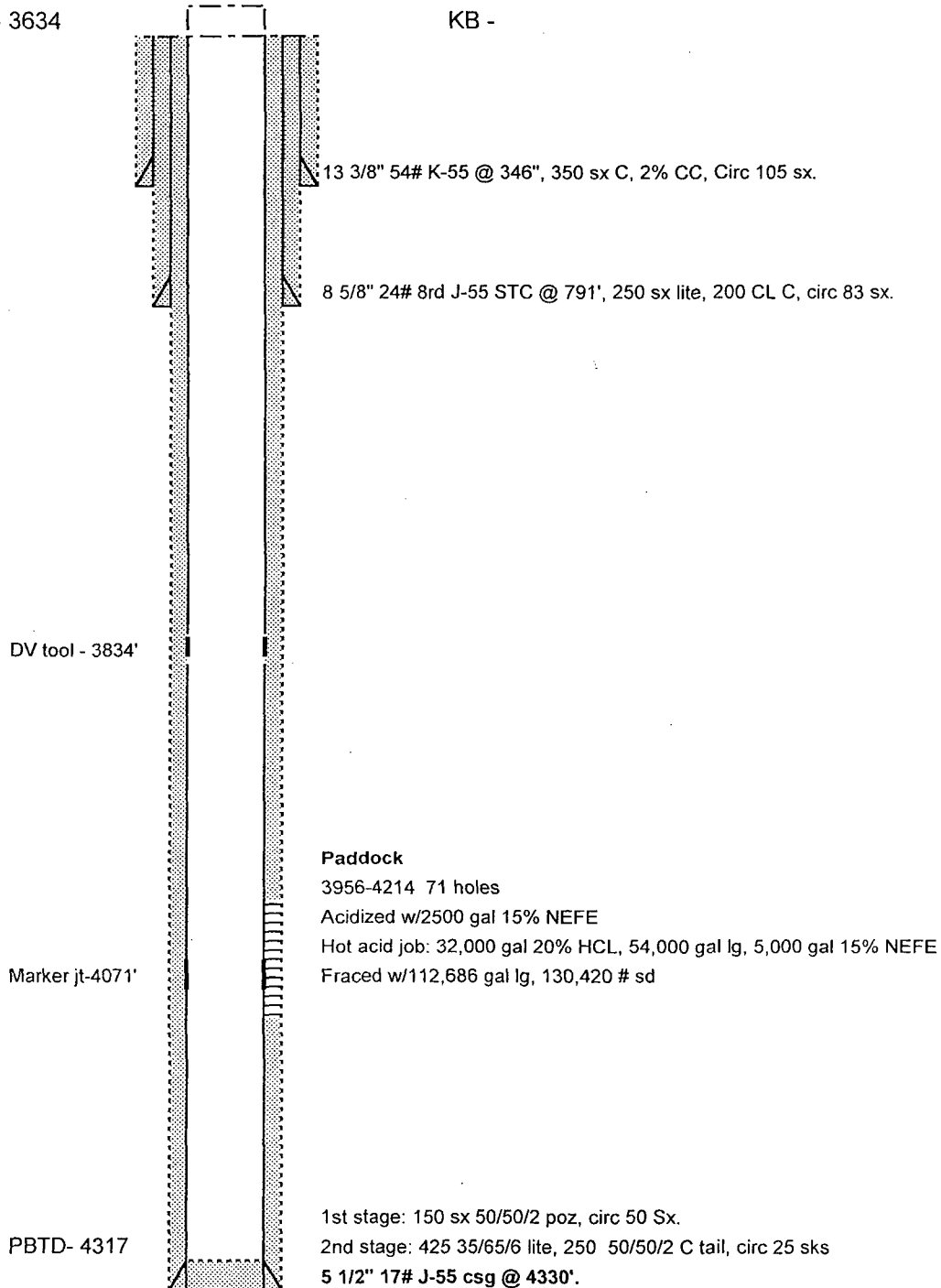
Western Federal #3
G-30-17S-29E

ACTIVE
EDDY CO., NM

SPUD - 3/19/99

Elevation - 3634

KB -



COG Operating, LLC

ACTIVE

Lease & Well #
30 015 30311

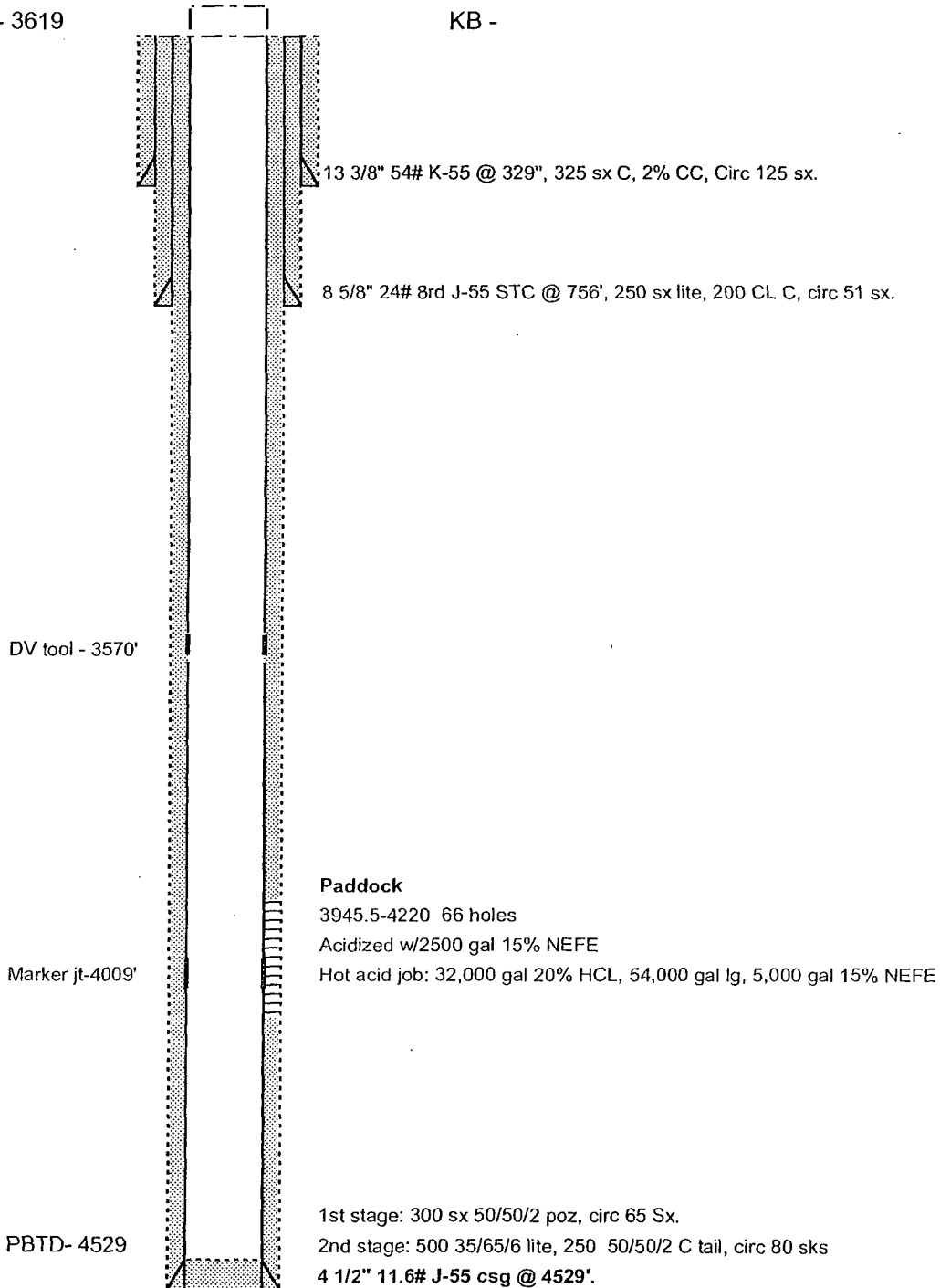
Western Federal #4

Eddy Co., NM
Sec 30 T17S R29E 2190 FNL & 2190 FEL

SPUD - 9/5/98

Elevation - 3619

KB -



COG OPERATING LLC

ACTIVE

Lease & Well # Western Federal #5

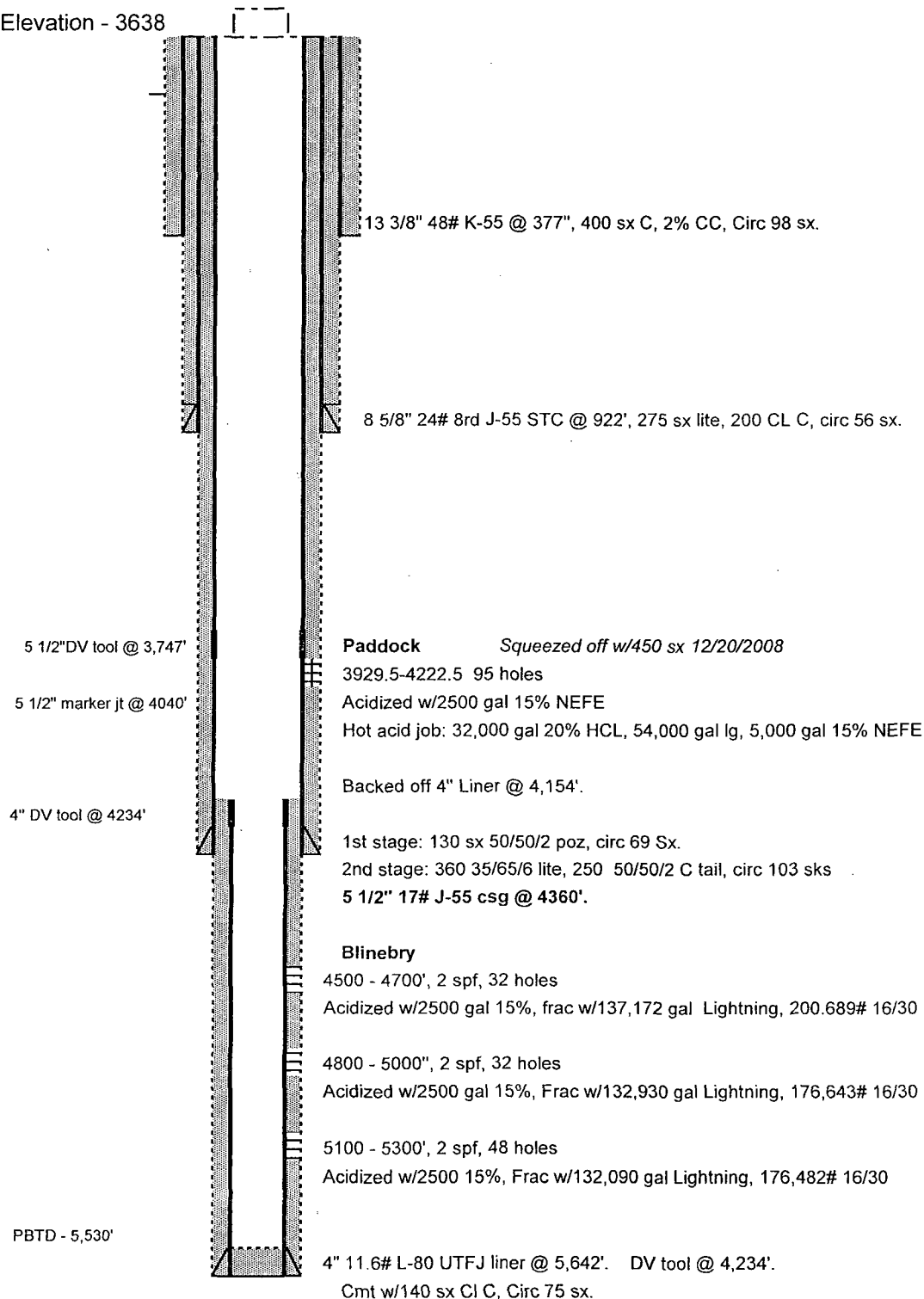
30 015 31777

Eddy County, NM

Sec 30 T17S R29E 2160 FN & 2310 FEL

SPUD - 5/23/01

Elevation - 3638



COG OPERATING LLC

ACTIVE

Lease & Well # Western Federal #6

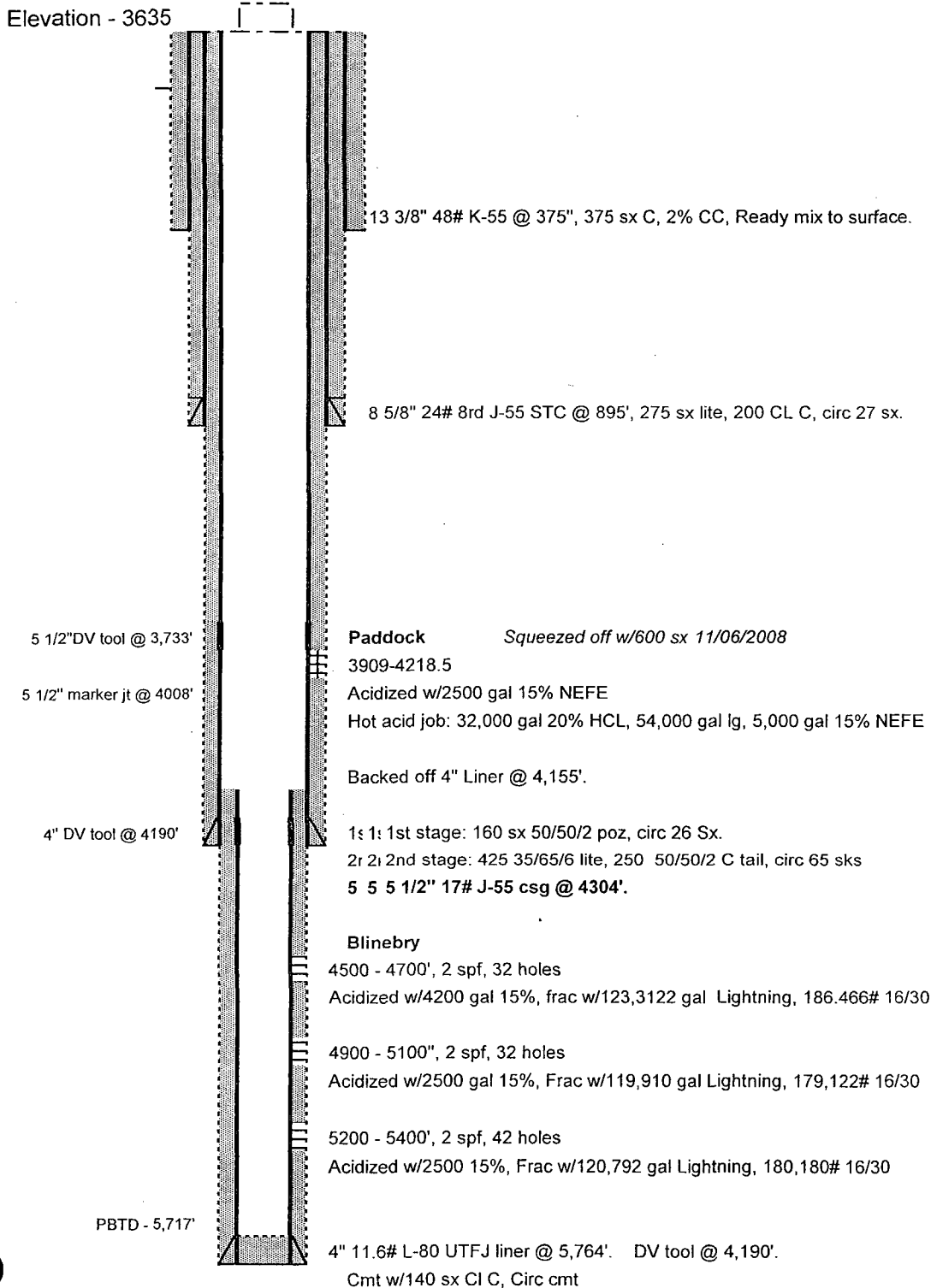
API#30-015-31706

Eddy co., NM

Sec 30 T 17S R29E 1650 FNL & 1650 FEL

SPUD - 6/11/01

Elevation - 3635



COG Operating LLC

Lease & Well #
API# 30-015-34510

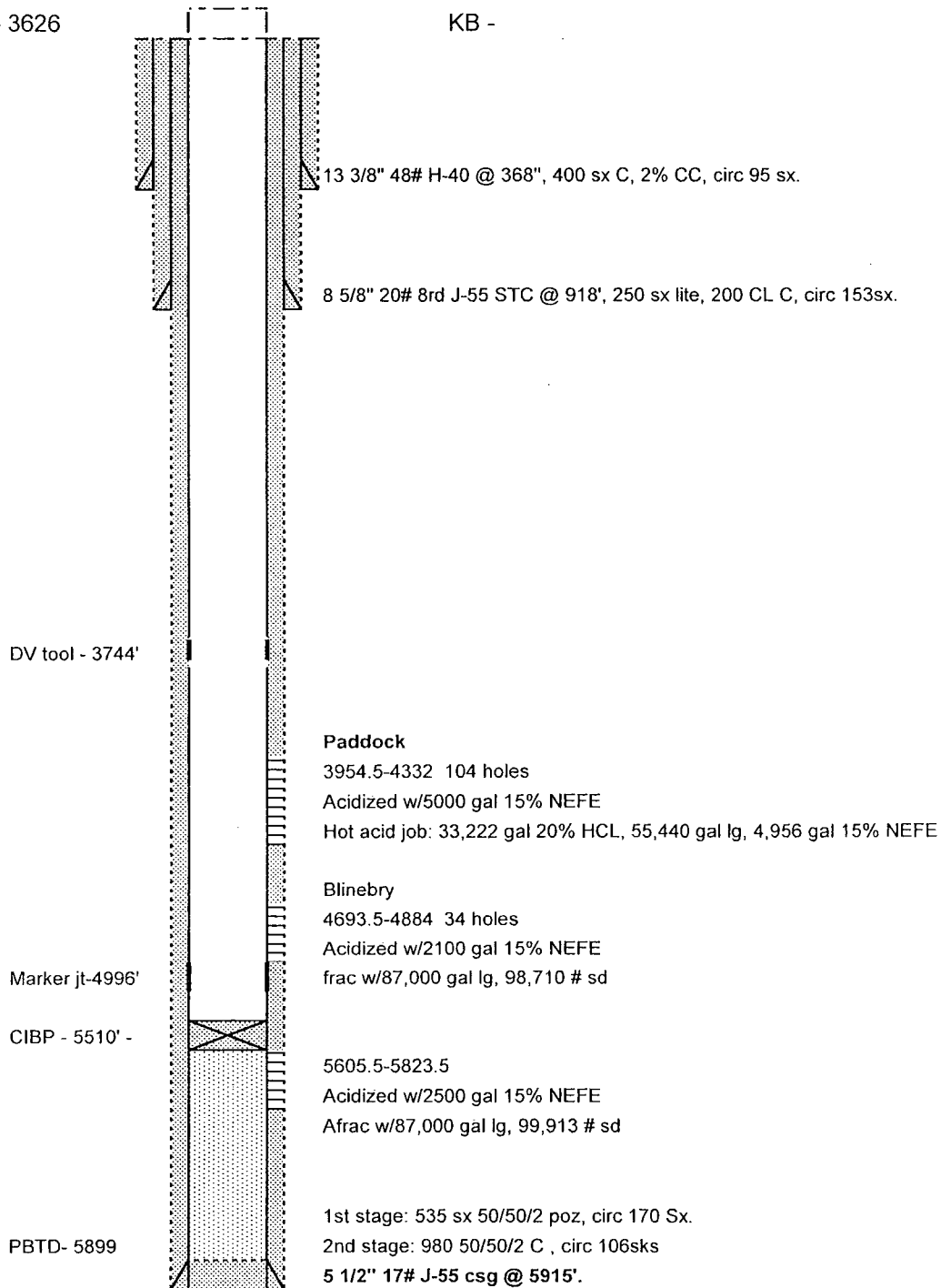
Western Federal #7
H-30-17S-29E

ACTIVE

SPUD - 1/17/06

Elevation - 3626

KB -



COG Operating LLC

Lease & Well #
API# 30-015-34815

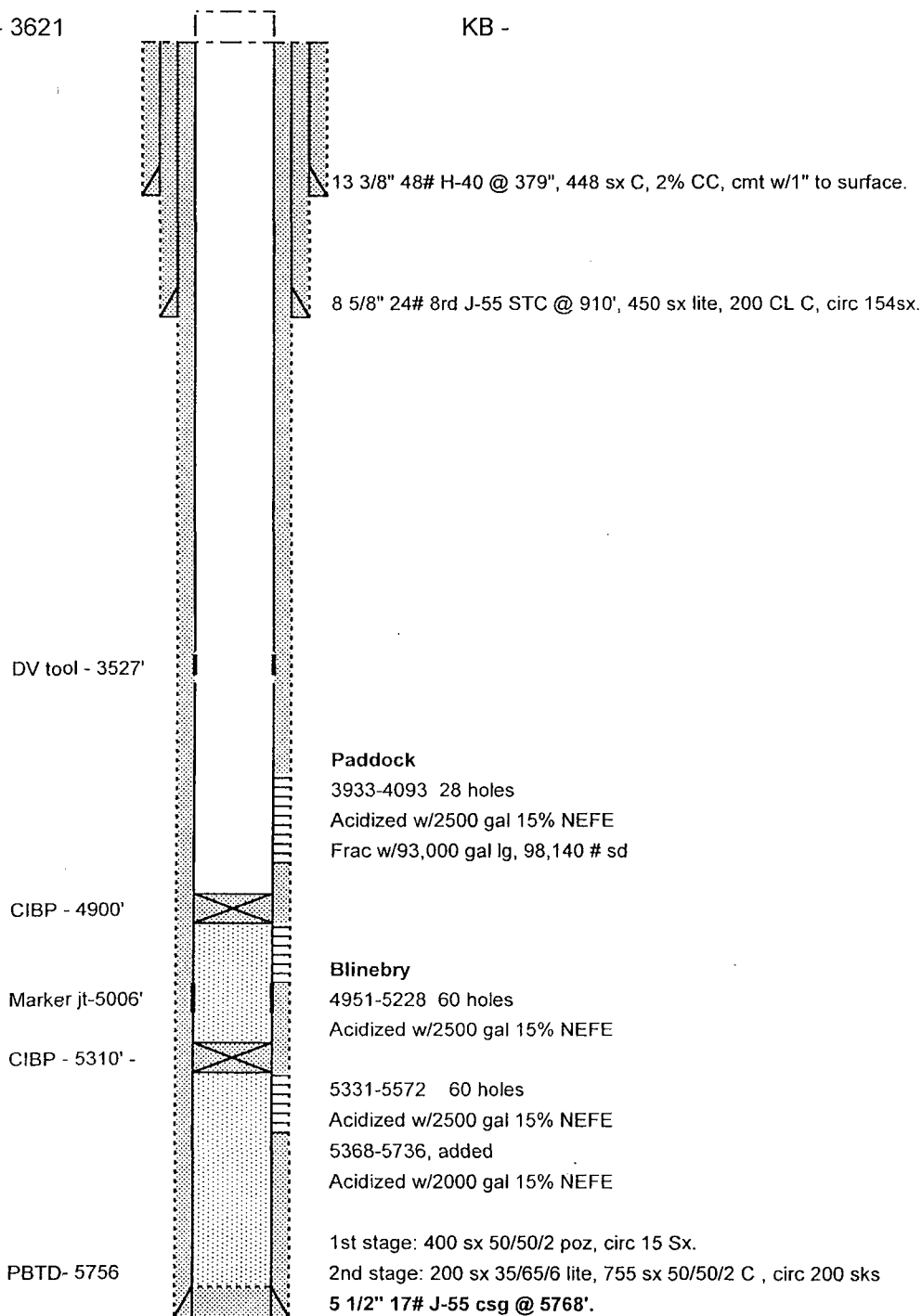
Western Federal #8
H-30-17S-29E

ACTIVE

SPUD - 1/9/07

Elevation - 3621

KB -



PI/Dwights PLUS on CD Scout Ticket**1 ATSELL-FEDERAL**

State: NEW MEXICO
 County: EDDY
 Operator: ~~SHENANDOAH OIL CORP~~ *Doral Energy*
 API: 30015104840000 IC:
 Initial Class: D
 Target Objective:
 Final Well Class: DO
 Status: OIL
 Field: GRAYBURG JACKSON
 Permit: on AUG 15, 1973
 First Report Date: AUG 15, 1973
 Projected TD: Formation:
 Hole Direction: VERTICAL
 IP Summary: Oil Gas Water Top Form
 30 BPD GRAYBURG

Location

Section, Twp., Range: 30 17 S 29 E
 Spot Code:
 Footage NS EW Origin: 990 FSL 2200 FEL CONGRESS SECTION
 Surface Remark:
 Principal Meridian: NEW MEXICO

Lat/Long: 32.8007600 / -104.1121600 TS

PBHL Footage NS EW Origin:
 PBHL Section:
 PBHL Remark:
 ABHL Footage NS EW Origin:
 ABHL Section:
 ABHL Remark:

Dates and Depths

Spud: MAR 07, 1965 Spud Date Code:
 TD: 2528 on
 LTD:
 TVD:
 PlugBack Depth:
 Completed: MAY 06, 1965
 Formation @ TD: 453QGSA Name: QUEEN / GRAYBURG / SAN ANDRES
 Ref. Elevation:
 KB. Elevation:
 Ground Elevation: 3641 GR
 Contractor:
 Rig Release Date: Rig #

IP # 001

Top Formation: GRAYBURG
 Base Formation: GRAYBURG
 Oil: 30 BPD
 Gas:
 Interval: 2470 - 2482
 Duration of Test: 24 Hours
 Oil: Gravity:
 Condst:
 Water:
 Method: PUMPING
 Choke:
 GOR:

PI/Dwights PLUS on CD Scout Ticket

Prod Method: PERF
Completed:
Pressures: FTP: SITP:
FCP: SICP:
Perforations: Interval Cnt Type Shots/Ft Top Formation
2470 - 2482 453GRBG GRAYBURG

Treatments: 1 Interval: 2470 - 2482
Fluid: 630 BBL FRAC Type: O
Additive:
Prop Agent: SAND 30000 LB
Formation Break Down Pressure:
Average Injection Rate:
Stages: Remarks: FRAC:ORIG TREATMENT CD

Casing, Liner, Tubing

Casing 8 5/8 IN @ 455 w/ 50 sx
Casing 5 1/2 IN @ 2528 w/ 175 sx

Formations and Logs

Log # 1 NE @ -

Old Information

Prior Well Number: 1
Prior Lease: ATSELL-FEDERAL
Spud Date: MAR 07, 1965
Old TD:

Operator Address

Street or PO Box:

City:
State, Zip: ,
Country:
Phone: Fax:
E-Mail:
Agent Name: Agent Code:
Agent Remark:

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	OIL-WO
County	:	EDDY	Drill Total Depth	:	2699
Field	:	ARTESIA	Log Total Depth	:	
Operator Name	:	BB OPERATING CO <i>Donal Energy</i>	True Vertical Depth	:	
Lease Name	:	LEONARD FEDERAL	Spud Date	:	NOV 03, 1992
Well Number	:	9	Comp Date	:	DEC 01, 1992
API Number	:	30015031910001			
Regulatory API	:				
Init Lahee Class	:	D X	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3646 DF
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453SADRD			
Oldest Age Pen	:	453			
Producing Formation	:	453GRBG			
Township	:	17 S	Section	:	30 SEC
Range	:	29 E	Spot	:	NW SE
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	2050 FSL 2310 FEL CONGRESS SECTION		
Latitude	:	32.8036700	Latitude (Bot)	:
Longitude	:	-104.1125100	Longitude (Bot)	:
Lat/Long. Source	:	TS		
Location Narrative	:	Type	Remark	
		DST_TOWN	8 MI W LOCO HILLS, NM	

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453PRMR	2301	2438		5500		PERF	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	4	BPD					22	MCFD		19	BBL	

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2301	2438	2500	GAL					ACID			
001	2301	2438	35000	GAL	154000	LB			FRAC		SAND	GELA

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2301	2305		PERF	453GRBG	453GRBG	A		1	FT
001	2309	2312		PERF	453GRBG	453GRBG	A		1	FT
001	2325	2331		PERF	453GRBG	453GRBG	A		1	FT
001	2350	2352		PERF	453GRBG	453GRBG	A		1	FT
001	2360	2367		PERF	453GRBG	453GRBG	A		1	FT
001	2377	2380		PERF	453GRBG	453GRBG	A		1	FT
001	2386	2388		PERF	453GRBG	453GRBG	A		1	FT
001	2398	2402		PERF	453GRBG	453GRBG	A		1	FT
001	2416	2422		PERF	453PRMR	453PRMR	A		1	FT
001	2425	2430		PERF	453PRMR	453PRMR	A		1	FT

PI/Dwights PLUS on CD Well Summary Report



General Information
State : NEW MEXICO
County : EDDY
Field : RED LAKE
Operator Name : HOVER A H
Lease Name : STATE B
Well Number : 2
API Number : 30015037490000
Regulatory API :
Init Lahee Class : D
Final Lahee Class : D
Permit Number :
Geologic Province : PERMIAN BASIN
Formation at TD : 000UNKWN UNKNOWN
Oldest Age Pen :
Township : 17 S
Range : 29 E
Base Meridian : NEW MEXICO

Final Status : TA-OG
Drill Total Depth : 553
Log Total Depth :
True Vertical Depth :

Spud Date : JUL 11, 1941
Comp Date : AUG 18, 1941

Hole Direction : VERTICAL
Reference Elevation :
Ground Elevation : 3645
KB Elevation :

Section : 30 SEC
Spot :

Additional Location Information
Footage Location : 2310 FSL 2310 FEL CONGRESS SECTION
Latitude : 32.8043800
Longitude : -104.1125100
Lat./Long. Source : TS

Latitude (Bot) :
Longitude (Bot) :



Casing Data
Size Base Depth Cement Unit
7 IN 482

PI/Dwights PLUS on CD Well Summary Report

State : NEW MEXICO
 County : EDDY
 Field : AID
 Operator Name : JOHNSTON HUGH L SR
 Lease Name : CONTINENTAL-STATE
 Well Number : 5
 API Number : 30015106150000
 Regulatory API :
 Init Lahee Class : WO
 Final Lahee Class : WO
 Permit Number :
 Geologic Province : PERMIAN BASIN
 Formation at TD : 000UNKWN UNKNOWN
 Oldest Age Pen : 453 PERMIAN GUADALUPIAN
 Township : 17 S
 Range : 29 E
 Base Meridian : NEW MEXICO

Final Status : TA
 Drill Total Depth : 980
 Log Total Depth :
 True Vertical Depth :
 Spud Date : SEP 21, 1965
 Comp Date : NOV 08, 1965
 Hole Direction : VERTICAL
 Reference Elevation : 3644 ES
 Ground Elevation :
 KB Elevation :
 Section : 30 SEC
 Spot :

Additional Location Information

Footage Location : 330 FNL 1902 FWL CONGRESS SECTION
 Latitude : 32.8119100 Latitude (Bot) :
 Longitude : -104.1148100 Longitude (Bot) :
 Lat./Long. Source : TS

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	740				LOG	
454SALT	SALT			565		LOG	

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	340	50 SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	2476
Field	:	GRAYBURG JACKSON	Log Total Depth	:	
Operator Name	:	SHENANDOAH OIL CORP <i>Mark</i>	True Vertical Depth	:	
Lease Name	:	ATSEL-FEDERAL			
Well Number	:	2	Spud Date	:	APR 16, 1965
API Number	:	30015105410000	Comp Date	:	JUN 16, 1965
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3626 ES
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453SADR			
Oldest Age Pen	:	453			
Producing Formation	:	453GRBG			
Township	:	17 S	Section	:	30 SEC
Range	:	29 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	1760 FSL 990 FEL CONGRESS SECTION
Latitude	:	32.8028900
Longitude	:	-104.1082100
Lat/Long. Source	:	TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2423	2433	16/64			PERF	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	32	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2423	2433	384	GAL					ACID			
001	2423	2433	691	BBL	30000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2423	2433		PERF	453GRBG	453GRBG	A			

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	830				LOG	
453SVRV	SEVEN RIVERS	1090				LOG	
453QUEN	QUEEN	1714				LOG	
453WRS	PENROSE/SD/	1893				LOG	
453GRBG	GRAYBURG	2131				LOG	
453PRMR	PREMIER /SD/	2415				LOG	
453SADR	SAN ANDRES D	2458				LOG	

PI/Dwights PLUS on CD Well Summary Report



454SALT SALT

609

LOG

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	475	50	SACK
5 1/2 IN	2470	200	SACK



PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	2486
Field	:	ARTESIA	Log Total Depth	:	
Operator Name	:	SHERANDOAH OIL CORP <i>macil</i>	True Vertical Depth	:	
Lease Name	:	CONTINENTAL-STATE <i>B</i>			
Well Number	:	2	Spud Date	:	DEC 29, 1964
API Number	:	30015103180000	Comp Date	:	FEB 01, 1965
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3655 ES
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453PRMR			
Oldest Age Pen	:	453			
Producing Formation	:	453GRBG			
Township	:	17 S	Section	:	30 SEC
Range	:	29 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	990 FSL 330 FWL CONGRESS SECTION
Latitude	:	32.8007200
Longitude	:	-104.1199700
Lat/Long. Source	:	TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2422	2432	24/64			PERF	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc
001	60	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001	50		300	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2422	2432	714	BBL	30000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2422	2432		PERF	453GRBG	453GRBG	A			

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	822				LOG	
453SVRV	SEVEN RIVERS	1715				LOG	
453QUEN	QUEEN	2130				LOG	
453GRBG	GRAYBURG	2210				LOG	
453PRMR	PREMIER /SD/	2462				LOG	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
--------	----------	-----	------	--------	----------

PI/Dwights PLUS on CD Well Summary Report

01 NE

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	413	50	SACK
5 1/2 IN	2486	100	SACK

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 2501
Field	: GRAYBURG JACKSON	Log Total Depth	:
Operator Name	: SHENANDOAH OIL CORP <i>mac K</i>	True Vertical Depth	:
Lease Name	: CONTINENTAL-STATE <i>E</i>		
Well Number	: 1	Spud Date	: DEC 13, 1964
API Number	: 30015103170000	Comp Date	: JAN 24, 1965
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3656 ES
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 000UNKWN UNKNOWN		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	: 453GRBG GRAYBURG		
Township	: 17 S	Section	: 30 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 1914 FSL 401 FWL CONGRESS SECTION		
Latitude	: 32.8032600	Latitude (Bot)	:
Longitude	: -104.1197300	Longitude (Bot)	:
Lat./Long. Source	: TS		

Initial Potential Tests									
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2358	2365	24/64			PERF	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	55	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001	50		300	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2358	2365	750	BBL	30000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2358	2365		PERF	453GRBG	453GRBG	A			

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	800				LOG	
453SVRV	SEVEN RIVERS	1050				LOG	
453QUEN	QUEEN	1665				LOG	
453GRBG	GRAYBURG	2065				LOG	
453DRD	SAN ANDRES D	2390				LOG	
453SALT	SALT			621		LOG	

Log Data

PI/Dwights PLUS on CD Well Summary Report

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	461	50	SACK
5 1/2 IN	2498	100	SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 2401
Field	: ARTESIA	Log Total Depth	:
Operator Name	: SHENANDOAH OIL CORP <i>mac 12</i>	True Vertical Depth	:
Lease Name	: CONTINENTAL-STATE <i>E</i>		
Well Number	: 4	Spud Date	: MAY 16, 1965
API Number	: 30015105420000	Comp Date	: JUN 21, 1965
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3645 ES
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SADR	SAN ANDRES D	
Oldest Age Pen	: 453	PERMIAN GUADALUPIAN	
Producing Formation	: 453GRBG	GRAYBURG	
Township	: 17 S	Section	: 30 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 2310 FNL 1911 FWL CONGRESS SECTION
Latitude	: 32.8064600
Longitude	: -104.1148000
Lat/Long. Source	: TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2331	2337	16/64			PERF	FLOWING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	144	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001			360	

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2331	2337	750	GAL					ACID			
001	2331	2337	750	BBL	30000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2331	2337		PERF	453GRBG	453GRBG	A			

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	790				LOG	
453SVRV	SEVEN RIVERS	1040				LOG	
453QUEN	QUEEN	1645				LOG	
453PENS	PENROSE/SD/	1817				LOG	
453GRBG	GRAYBURG	2048				LOG	
453PRMR	PREMIER /SD/	2323				LOG	
453SADR	SAN ANDRES D	2363				LOG	

PI/Dwights PLUS on CD Well Summary Report

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	450	50	SACK
5 1/2 IN	2401	125	SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	3650
Field	:	GRAYBURG JACKSON	Log Total Depth	:	
Operator Name	:	SIETE OIL & GAS CORP <i>mac K</i>	True Vertical Depth	:	
Lease Name	:	EALGE FEDERAL			
Well Number	:	1	Spud Date	:	AUG 14, 1985
API Number	:	30015253650000	Comp Date	:	SEP 18, 1985
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3646 KB
Permit Number	:		Ground Elevation	:	3638
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	3646
Formation at TD	:	453SADRD			
Oldest Age Pen	:	453			
Producing Formation	:	453SADRD			
Township	:	17 S	Section	:	30 SEC
Range	:	29 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	660 FNL 1980 FEL CONGRESS SECTION
Latitude	:	32.8110000
Longitude	:	-104.1114200
Lat./Long. Source	:	TS
Location Narrative	:	Type
	:	LOCATION
	:	Remark
	:	8 MI W LOCO HILLS, NM

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453SADRD	453SADRD	2370	3597		676	38	PERF	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc
001	37	BPD								132	BBL	

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2370	3597		PERF	453SADRD	453SADRD	A	25		

Production Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453SADRD	453SADRD	2370	3597				PERF	PUMPING

Production Volume

Test	Amount	Oil Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc	Amount	Unit	Desc
001	40	BBL								110	BBL	

Production Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2370	3597	35500	GAL	22000	LB			FRAC		SAND	

Production Perforation

PI/Dwights PLUS on CD Well Summary Report

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2370	3597		PERF	453SADR	453SADR	A	25		

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	762				LOG	
453SVRV	SEVEN RIVERS	852				LOG	
453BWRS	BOWERS SD	1368				LOG	
453QUEN	QUEEN	1594				LOG	
453PNRS	PENROSE/SD/	1762				LOG	
453GRBG	GRAYBURG	1980				LOG	
453LCHL	LOCO HILLS	2060				LOG	
453METX	METEX	2128				LOG	
453PRMR	PREMIER /SD/	2262				LOG	
453SADR	SAN ANDRES D	2282				LOG	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NEC				
01	DNCP				
01	GR				
01	CA				
01	LLD				
01	MFSF				
01	CP				
01	CB				

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	430	400	SACK
5 1/2 IN	3650	1300	SACK

Tubing Data

Size	Base Depth	Mixed String
2 3/8 IN	3630	

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 2462
Field	: ARTESIA	Log Total Depth	:
Operator Name	: SHENANDOAH OIL CORP <i>MacK</i>	True Vertical Depth	:
Lease Name	: JOHNSTON-STATE		
Well Number	: 1	Spud Date	: JUN 17, 1965
API Number	: 30015105480000	Comp Date	: JUL 27, 1965
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	:
Permit Number	:	Ground Elevation	: 3644
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SADRD		
Oldest Age Pen	: 453		
Producing Formation	: 453GRBG		
Township	: 17 S	Section	: 30 SEC
Range	: 29 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information	
Footage Location	: 1760 FSL 1592 FWL CONGRESS SECTION
Latitude	: 32.8028500
Longitude	: -104.1158600
Lat./Long. Source	: TS

Initial Potential Tests									
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2386	2428	16/64			PERF	FLOWING

IP Volume											
Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit
001	54	BPD									

IP Pressure				
Test	FTP	SITP	FCP	SICP
001	60		200	

IP Treatment											
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent
001	2386	2428	1500	GAL					ACID		
001	2386	2428	675	BBL	29000	LB			FRAC		SAND

IP Perforation											
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per	
001	2386	2388		PERF	453GRBG	453GRBG	A				
001	2390	2399		PERF	453GRBG	453GRBG	A				
001	2410	2413		PERF	453GRBG	453GRBG	A				
001	2417	2421		PERF	453GRBG	453GRBG	A				
001	2423	2428		PERF	453GRBG	453GRBG	A				

Formations							
Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	520				LOG	
453SVRV	SEVEN RIVERS	1074				LOG	
453QUEN	QUEEN	1690				LOG	

PI/Dwights PLUS on CD Well Summary Report

453GRBG	GRAYBURG	2105	LOG
453SADRD	SAN ANDRES D	2432	LOG
454SALT	SALT	620	LOG

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	465	50	SACK
5 1/2 IN	2461	140	SACK

NADEL AND GUSSMAN HEYCO

ACTIVE

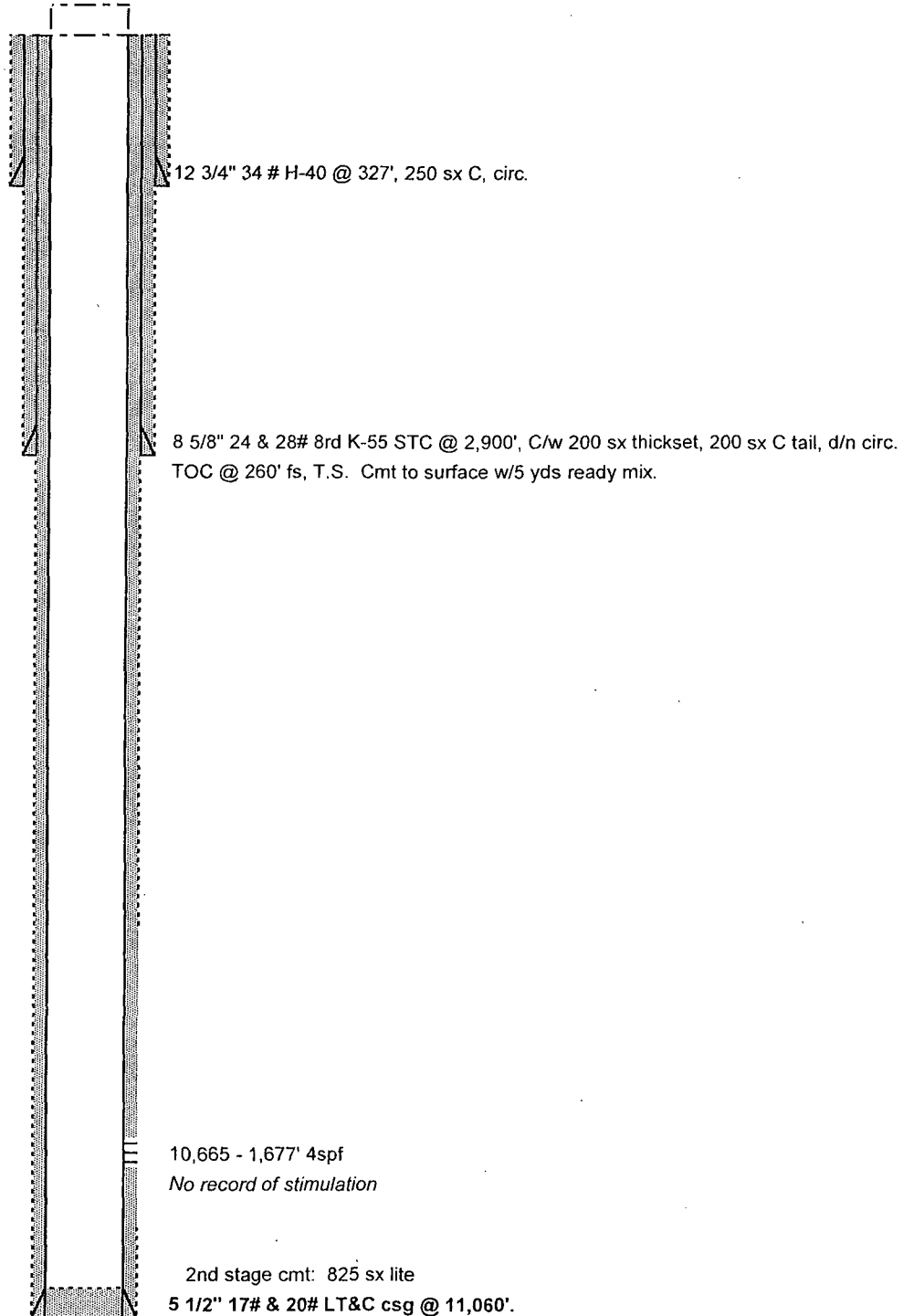
Lease & Well #
30 015 22000

Empire S Deep Unit #13

SPUD - 12/15/95

Eddy Co., NM
Sec 30 T17S R29E 660 FSL & 1980 FWL

Elevation - 3646'



HARVEY YATES CO., INC

Lease & Well #
30 015 22400

Empire S Deep Unit #18

P&A 11-5-88

SPUD - 4/8/1978

Eddy Co., NM
Sec 30 T17S R29E 1980 FNL & 1980 FWL

Elevation - 3643'

10 sx cmt plug 30' to surface

100' cmt plug 4450-350'

12 3/4" 34 # H-40 @ 400', 475 sx C, circ. 21 SX

100' cmt plug 2850-2955'

8 5/8" 24 & 28# 8rd K-55 STC @ 2,895', C/w 750 sx lead, 200 sx C tail, d/n circ.
TOC @ 600' fs, T.S. Pump 250 sx down annulus, cmt to surface.

25 sx cmt plug @ 3580 -3680'

Cut casing @ 3,630'

TOC @ 4,010'

7859 - 8022'

CIBP @ 7940'

cmt plug 8750 - 8850

25 sx cmt plug 10,000 - 10,100'

40 sx cmt plug 10,400 - 10,500'

MORROW
10,722 - 10,758' 120 holes
No record of stimulation

PBTD- 6,989'

1st stage cmt: 850 sx H w/add, circ 150 sx
2nd stage cmt: 575 sx lite lead, 100 sx H tail. TOC @ 4,010'.
5 1/2" 17# N-80 & K-55 LT&C csg @ 11,010'.

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	D&A-O
County	:	EDDY	Drill Total Depth	:	900
Field	:	RED LAKE	Log Total Depth	:	
Operator Name	:	AID HERBERT	True Vertical Depth	:	
Lease Name	:	WENTZ-STATE			
Well Number	:	2	Spud Date	:	MAR 22, 1942
API Number	:	30015015220000	Comp Date	:	APR 04, 1942
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	D	Reference Elevation	:	3679 ES
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	000UNKWN UNKNOWN			
Oldest Age Pen	:	454 PERMIAN OCHOAN			
Township	:	17 S	Section	:	24 SEC
Range	:	28 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	1650 FSL 990 FEL CONGRESS SECTION
Latitude	:	32.8183800
Longitude	:	-104.1241100
Lat./Long. Source	:	TS

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454SALT	SALT	470		580		DRLR	

Casing Data

Size	Base Depth	Cement Unit
8 1/4 IN	325	

Lime Rock Resources

Lease & Well # Aid 24 State #2

Active

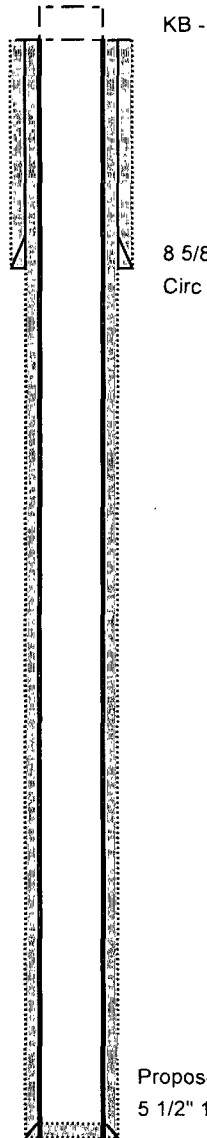
30 015 36247

Eddy Co., NM

Spud - 3/1/2010

Sec 24, T17S, R28E, 990 FSL & 480 FEL

Elevation - 3675 GR



PBTD- 5304'

Lime Rock Resources

Lease & Well # Aid 24 State #4

Active

30 015 36249

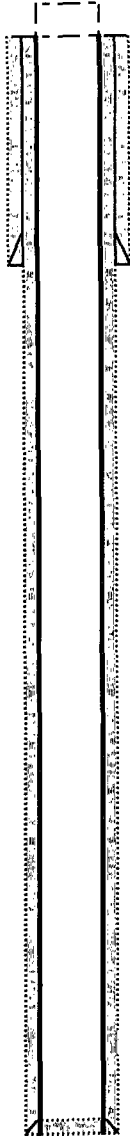
Eddy Co., NM

Spud - 2/11/2010

Sec 24, T17S, R28E, 2310 FSL & 430 FEL

Elevation - 3678 GR

KB -



8 5/8" 24# STC J-55 @ 350', c/w 175 sx lead, 200 sx tail.
Circ 129 sx.

Proposed

5 1/2" 17# LTC J-55 @ 5,300', C/w 550 sx lead, 650 sx tail, circ 128 sx.

PBTD- 5296'

Lime Rock Resources

Lease & Well # Aid 24 State #5

Active

30 015 36246

Eddy Co., NM

Spud - 11/30/2009

Sec 24, T17S, R28E, 530 FSL & 990 FEL

Elevation - 3674 GR

KB -

8 5/8" 24# STC J-55 @ 393', c/w 175 sx lead, 200 sx tail.
Circ 121 sx.

4094-4247' 2 holes

Acidized w/4,410 gal 15% NEFE, frac/81,548 gal Viking, 68,750\$ 16/30, 37,616# RC sd

4300-4630 88 holes

Acidized w/3,400 gal 15% NEFE, frac w/139,263 gal Viking, 108,118# 16/30, 77,433# RC sd

4702-5161 42 holes

Acidized w/3500 gal 15% NEFE, frac w/180,485 gal Viking, 185,070# 16/30, 33,680 # RC sd

PBTD- 5304'

5 1/2" 17# LTC J-55 @ 5,341', C/w 550 sx lead, 650 sx tail, circ 128 sx.

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 2840
Field	: AID	Log Total Depth	:
Operator Name	: DONNELLY DRLG CO	True Vertical Depth	:
Lease Name	: WENTZ-STATE		
Well Number	: 1	Spud Date	: APR 13, 1941
API Number	: 30015015210000	Comp Date	: JUL 15, 1941
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3680 ES
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 000UNKWN UNKNOWN		
Oldest Age Pen	: 454 PERMIAN OCHOAN		
Producing Formation	:		
Township	: 17 S	Section	: 24 SEC
Range	: 28 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 330 FSL 2310 FEL CONGRESS SECTION		
Latitude	: 32.8146500	Latitude (Bot)	:
Longitude	: -104.1284200	Longitude (Bot)	:
Lat./Long. Source	: TS		

Initial Potential Tests									
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			810	910				OPENHOLE	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	21	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Bottom Hole

Test	Press	Temp	Depth	Time
001				

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	810	910		OPENHOLE						

Production Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			1965	2400				OPENHOLE	
002			1965	2204				OPENHOLE	
003			810	895				OPENHOLE	

Production Shutoff

Shutoff	Top	Base	Plugback
Type	Depth	Depth	Depth
001	UNDG		2400
002	UNDG		2204

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	TA
County	:	EDDY	Drill Total Depth	:	942
Field	:	AID	Log Total Depth	:	
Operator Name	:	DONNELLY DRLG CO	True Vertical Depth	:	
Lease Name	:	WENTZ-STATE			
Well Number	:	3	Spud Date	:	JAN 14, 1958
API Number	:	30015015250000	Comp Date	:	MAY 21, 1958
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3671 DF
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	000UNKWN UNKNOWN			
Oldest Age Pen	:	453 PERMIAN GUADALUPIAN			
Township	:	17 S	Section	:	24 SEC
Range	:	28 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	990 FSL 330 FEL CONGRESS SECTION
Latitude	:	32.8166200
Longitude	:	-104.1219700
Lat./Long. Source	:	TS

Production Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	Oil GOR	Prod Grav	Prod Method	Test Method
001			860	875				OPENHOLE	SWABBING

Production Shutoff

Test	Shutoff Type	Top Depth	Base Depth	Plugback Depth
001	UNDG			875

Production Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001												

Production Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	860	875	14000	GAL					FRAC			

Production Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	860	875		OPENHOLE						

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454ANDR	ANHYDRITE PERMIAN / OCHOAN	245				DRLR	
454SALT	SALT	500		564		DRLR	
453SVRV	SEVEN RIVERS	865				DRLR	

Casing Data

Size	Base Depth	Cement Unit
7 IN	412	
4 1/2 IN	860	25 SACK

PI/Dwights PLUS on CD Well Summary Report

003 UNDG

895

Production Volume

Test	Amount	Oil	Desc	Amount	Cond	Desc	Amount	Gas	Desc	Amount	Wtr	Desc
		Unit			Unit			Unit			Unit	
001												
002	1	GAL										
003	500	FT										

Production Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2190	2220	80	QT					FRAC			
002	2052	2072	80	QT					FRAC			
003	845	895	150	QT					FRAC			

Production Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	1965	2400		OPENHOLE						
002	1965	2204		OPENHOLE						
003	810	895		OPENHOLE						

Formations

Form Code	Form Name
454SALT	SALT

Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
385				DRLR	

Casing Data

Size	Base Depth	Cement	Unit
8 1/4 IN	565	50	SACK
6 5/8 IN	810	35	SACK

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	:	NEW MEXICO	Final Status	:	D&A
County	:	EDDY	Drill Total Depth	:	920
Field	:	AID	Log Total Depth	:	
Operator Name	:	DONNELLY DRLG CO	True Vertical Depth	:	
Lease Name	:	WENTZ STATE			
Well Number	:	4	Spud Date	:	NOV 12, 1976
API Number	:	30015216160000	Comp Date	:	JAN 24, 1977
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	D	Reference Elevation	:	
Permit Number	:		Ground Elevation	:	3677
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453SVRV			
Oldest Age Pen	:	453			
Township	:	17 S	Section	:	24 SEC
Range	:	28 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information

Footage Location	:	2310 FSL 330 FEL CONGRESS SECTION
Latitude	:	32.8202500
Longitude	:	-104.1219600
Lat./Long. Source	:	TS

Production Tests

Test	Top	Base	Top	Base	Oil	Prod	Test
Form	Form	Form	Depth	Depth	GOR	Grav	Method
001							UNDESIGNATED

Production Volume

Test	Amount	Oil	Cond	Gas	Wtr
Unit	Unit	Unit	Unit	Unit	Unit
001					

PI/Dwights PLUS on CD Well Summary Report**General Information**

State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 878
Field	: AID	Log Total Depth	:
Operator Name	: DONNELLY DRUG CO <i>Don-a</i>	True Vertical Depth	:
Lease Name	: WENTZ-STATE		
Well Number	: 1	Spud Date	: JAN 15, 1953
API Number	: 30015015230000	Comp Date	: FEB 10, 1953
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3667 DF
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SVRV		
Oldest Age Pen	: 453		
Producing Formation	:		
Township	: 17 S	Section	: 24 SEC
Range	: 28 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information

Footage Location	: 330 FSL 330 FEL CONGRESS SECTION
Latitude	: 32.8148100
Longitude	: -104.1219700
Lat./Long. Source	: TS

Initial Potential Tests

Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			865	878			36	OPENHOLE	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	12	BPD										

IP Pressure

Test	FTP	SITP	FCP	SICP
001				

IP Bottom Hole

Test	Press	Temp	Depth	Time
001				

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	865	878		OPENHOLE						

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	365				DRLR	

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	330	20 SACK
5 1/2 IN	865	10 SACK

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 870
Field	: AID	Log Total Depth	:
Operator Name	: DONNELLY DRLG CO <i>Donal</i>	True Vertical Depth	:
Lease Name	: WENTZ-STATE		
Well Number	: 2	Spud Date	: APR 03, 1953
API Number	: 30015015240000	Comp Date	: JUN 10, 1953
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3671 DF
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453YTES YATES		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	:		
Township	: 17 S	Section	: 24 SEC
Range	: 28 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 330 FSL 990 FEL CONGRESS SECTION		
Latitude	: 32.8147500	Latitude (Bot)	:
Longitude	: -104.1241200	Longitude (Bot)	:
Lat./Long. Source	: TS		

Initial Potential Tests									
Test	Top	Base	Top	Base	Choke	GOR	Oil	Prod	Test
001	Form	Form	Depth	Depth			Grav	Method	Method
			835	870			41	OPENHOLE	PUMPING

IP Volume					
Test	Amount	Oil	Cond	Gas	Wtr
001	5	Unit	Unit	Unit	Unit
		BPD			

IP Pressure				
Test	FTP	SITP	FCP	SICP
001				

IP Bottom Hole				
Test	Press	Temp	Depth	Time
001				

IP Treatment												
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	850	860	10	QT					FRAC			

IP Perforation										
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	835	870		OPENHOLE						

Formations							
Form Code	Form Name	Top	Top	Base	Base	Source	Lithology
454SALT	SALT	Depth	TVD	Depth	TVD		
454YTES	YATES	425		465		DRLR	
		850				DRLR	

Casing Data			
Size	Base Depth	Cement	Unit
7 IN	330	10	SACK

PI/Dwights PLUS on CD Well Summary Report

5 1/2 IN

835

10 SACK

LIME ROCK RERESOURCES

Lease & Well # Aid 24P State #34

Active

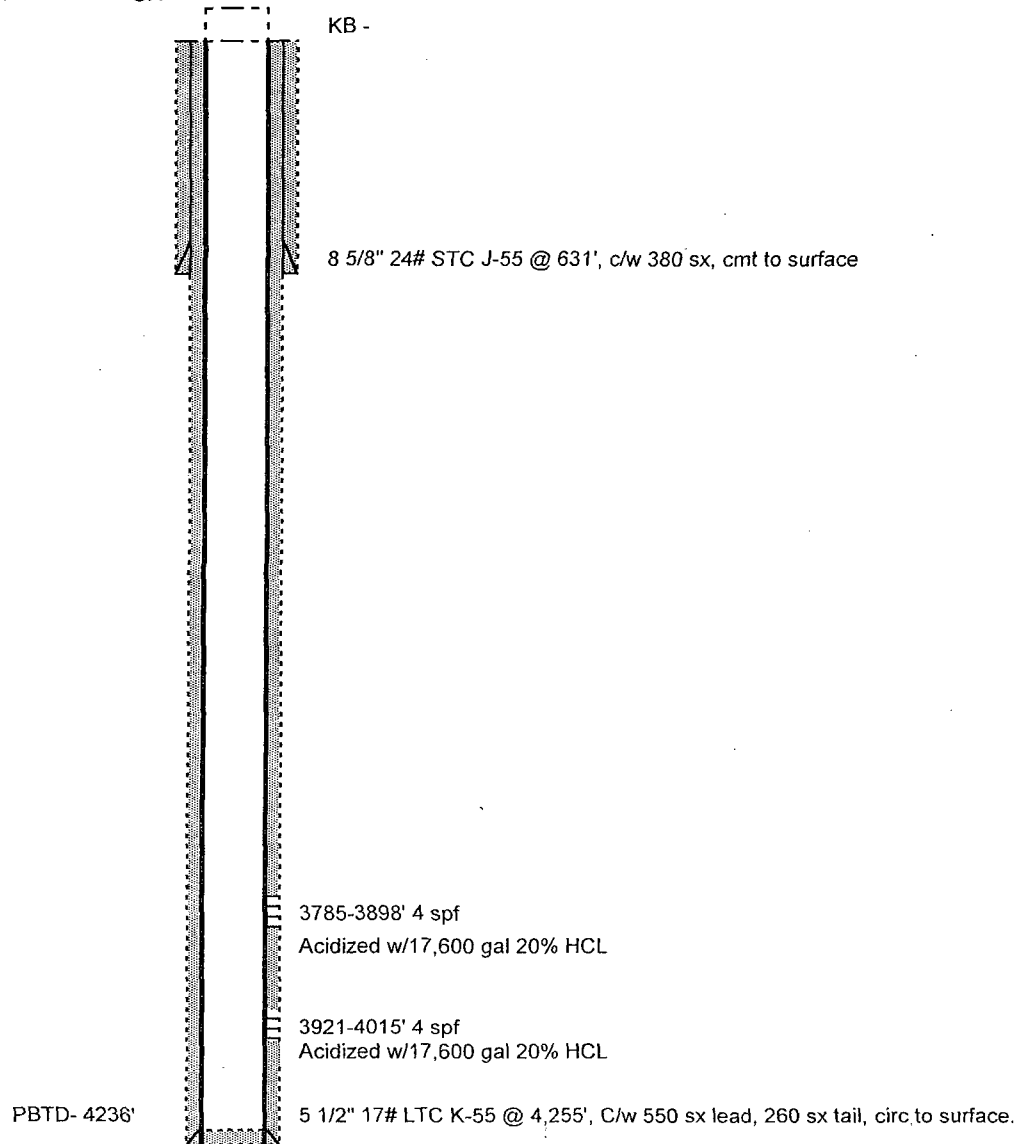
30 015 31549

Eddy Co., NM

Spud - 2/1/2001

Sec 24 O, T17S, R28E, 480 FSL & 1900 FEL

Elevation - 3680 GR



PI/Dwights PLUS on CD Well Summary Report

General Information					
Date	:	NEW MEXICO	Final Status	:	TA-O
County	:	EDDY	Drill Total Depth	:	910
Field	:	RED LAKE	Log Total Depth	:	
Operator Name	:	AID HERBERT	True Vertical Depth	:	
Lease Name	:	FWY-STATE			
Well Number	:	1	Spud Date	:	NOV 05, 1941
API Number	:	30015015260000	Comp Date	:	APR 22, 1942
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	3680 ES
Permit Number	:		Ground Elevation	:	
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	000UNKWN UNKNOWN			
Oldest Age Pen	:	454 PERMIAN OCHOAN			
Township	:	17 S	Section	:	25 SEC
Range	:	28 E	Spot	:	
Base Meridian	:	NEW MEXICO			

Additional Location Information			
Footage Location	:	330 FNL 2310 FEL CONGRESS SECTION	
Latitude	:	32.8128300	Latitude (Bot)
Longitude	:	-104.1285100	Longitude (Bot)
Lat./Long. Source	:	TS	

Production Tests								
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	Oil GOR Grav	Prod Method	Test Method
001			910	910			OPENHOLE	SWABBING
002			910	910			OPENHOLE	SWABBING
003								UNDESIGNATED

Production Volume												
Test	Amount	Oil Unit	Desc	Amount	Unit	Cond Desc	Amount	Unit	Gas Desc	Amount	Unit	Wtr Desc
001	1	BBL										
002	4	BBL										
003												

Production Pressure				
Test	FTP	SITP	FCP	SICP
001				

Production Treatment												
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
002		910	125	GAL					ACID			
003		910	500	GAL					ACID			

Production Perforation										
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	910	910		OPENHOLE						
002	910	910		OPENHOLE						

Formations							
Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
SALT	SALT	450				DRLR	

Casing Data

PI/Dwights PLUS on CD Well Summary Report

Size	Base Depth	Cement Unit
8 1/4 IN	345	

BP OF NORTH AMERICA

Lease & Well # Empire Abo Unit 43B

30 015 01540

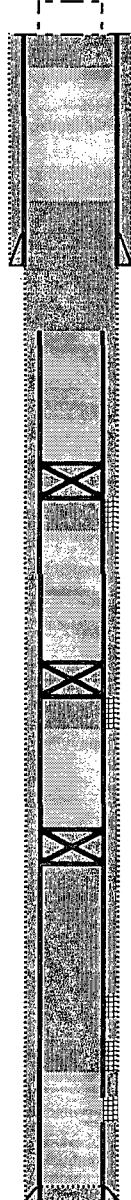
Eddy Co., NM

Spud - 7/25/1960

Sec 25 G, T17S, R28E, 2310 FNL & 1980 FEL

Elevation - 3690 GR

P&A 11-20-75



KB -

10 sx cmt plug @ surface

Set cmt retainer @ 680', pumped 200 sx H nt., spotted 30 sx on top of retainer

Top of cmt @ 585'

8 5/8" 28# STC J-55 @ 705', c/w 375 sx, cmt to surface

Cut off 5 1/2" csg @ 840' & LD.

Perf'd 1500-02' 4 holes, pumped 1800 sx, TOC @ 840', TS.

Cmt retainer @ 1409'

Perf'd 2700-2702' w/4 holes, cmt under retainer w/1200 sx. TOC @ 1450' TS

Cmt retainer @ 2590'

TOC @ 5,355'

Re-squeezed w/200 sx 11/10/75

6228-6245' Acidized w/3,000 gal 15% HCL

Squeezed w/200 sx 3/2/61

6240-6266' Acidized w/33,000 gal 15% HCL

Squeezed w/200 sx 2/4/61

6320-6322, squeezed w/45 sx nt. 3/4/61

re-perf'd, re-acidized w/18,000 gal 15% 3/5/61

PBTD- 4236'

5 1/2" 15.5# @ 6,483', C/w 150 sx

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 864
Field	: AID	Log Total Depth	: 865
Operator Name	: DONNELLY DRILLING CO <i>Doral</i>	True Vertical Depth	:
Lease Name	: FWY-STATE		
Well Number	: 2	Spud Date	: DEC 20, 1941
API Number	: 30015015270000	Comp Date	: FEB 25, 1943
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3667 ES
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SVRV SEVEN RIVERS		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	:		
Township	: 17 S	Section	: 25 SEC
Range	: 28 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 330 FNL 990 FEL CONGRESS SECTION		
Latitude	: 32.8129300	Latitude (Bot)	:
Longitude	: -104.1242200	Longitude (Bot)	:
Lat./Long. Source	: TS		

Initial Potential Tests									
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001			800	864				OPENHOLE	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	8	BPD										

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	855	865	50	QT					FRAC			

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	800	864		OPENHOLE						

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454SALT	SALT	460				DRLR	

Formation Tests

Test	Type	Top Depth	Base Depth	Top Form	Top Choke	Bottom Choke	Show
001	DST	864	864				

Pipe Recovery

Test	Amount	Unit	Desc	Rec Type	Rec Method
001	500	FT	O		PIPE

Casing Data

PI/Dwights PLUS on CD Well Summary Report

Size	Base Depth	Cement Unit
8 1/4 IN	345	

PI/Dwights PLUS on CD Well Summary Report

		General Information		
State	:	NEW MEXICO	Final Status	: OIL
County	:	EDDY	Drill Total Depth	: 2222
Field	:	AID	Log Total Depth	:
Operator Name	:	DONNELLY DRILLING CO <i>Donal</i>	True Vertical Depth	:
Lease Name	:	FWY-STATE		
Well Number	:	3	Spud Date	: JAN 11, 1961
API Number	:	30015015310000	Comp Date	: MAR 14, 1961
Regulatory API	:			
Init Lahee Class	:	D	Hole Direction	: VERTICAL
Final Lahee Class	:	DO	Reference Elevation	: 3671 DF
Permit Number	:		Ground Elevation	:
Geologic Province	:	PERMIAN BASIN	KB Elevation	:
Formation at TD	:	453PRMR		
Oldest Age Pen	:	453		
Producing Formation	:			
Township	:	17 S	Section	: 25 SEC
Range	:	28 E	Spot	:
Base Meridian	:	NEW MEXICO		

		Additional Location Information		
Footage Location	:	330 FNL 1650 FEL CONGRESS SECTION		
Latitude	:	32.8128800	Latitude (Bot)	:
Longitude	:	-104.1263600	Longitude (Bot)	:
Lat./Long. Source	:	TS		

		Initial Potential Tests		
Test	Top	Base	Top	Base
001	Form	Form	Depth	Depth
			840	860
			Choke	
			12/64	
			GOR	
			Oil Grav	Prod Method
			37	OPENHOLE
				Test Method
				FLOWING

		IP Volume		
Test	Amount	Oil Unit	Cond Unit	Gas Unit
001	35	BPD		
			Wtr Unit	

		IP Pressure		
Test	FTP	SITP	FCP	SICP
001	50		100	

		IP Treatment		
Test	Top	Base	Volume	Meas Amount
001	840	860	14784	GAL 22000
			T/P	PSI
			LB	
			Inj Type	Nbr
			FRAC	
			Agent	Add
			SAND	

		IP Perforation		
Test	Top	Base	Type	Method
001	840	860		OPENHOLE
			Top Form	Base Form
				Status
				Count
				Density
				Per

		Formations		
Form Code	Form Name	Top Depth	Top TVD	Base Depth
453YTES	YATES	568		
453SVRV	SEVEN RIVERS	955		
453QUEN	QUEEN	1533		
453GRBG	GRAYBURG	1927		
453MR	PREMIER /SD/	2196		
			Base TVD	Source
				Lithology
				LOG
				LOG
				LOG
				LOG
				LOG

Formation Tests

PI/Dwights PLUS on CD Well Summary Report

Test	Type	Top Depth	Base Depth	Top Form	Top Choke	Bottom Choke	Show
001	DST	845	850				

Pressure and Time

Test	Init	Hydro Final	Init Flow		Final Flow		Shut-in		Open Time		Shut-in Time	
			Init	Final	Init	Final	Init	Final	Init	Final	Init	Final
001												60

Pipe Recovery

Test	Amount	Unit	Desc	Rec Type	Rec Method
001	8	GAL	O		SMPL CHAMBER

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
01	NE				

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	316	
5 1/2 IN	840	75 SACK

LIME ROCK RESOURCES LP

Lease & Well #
30 015 24522

Marathon 25 State #7

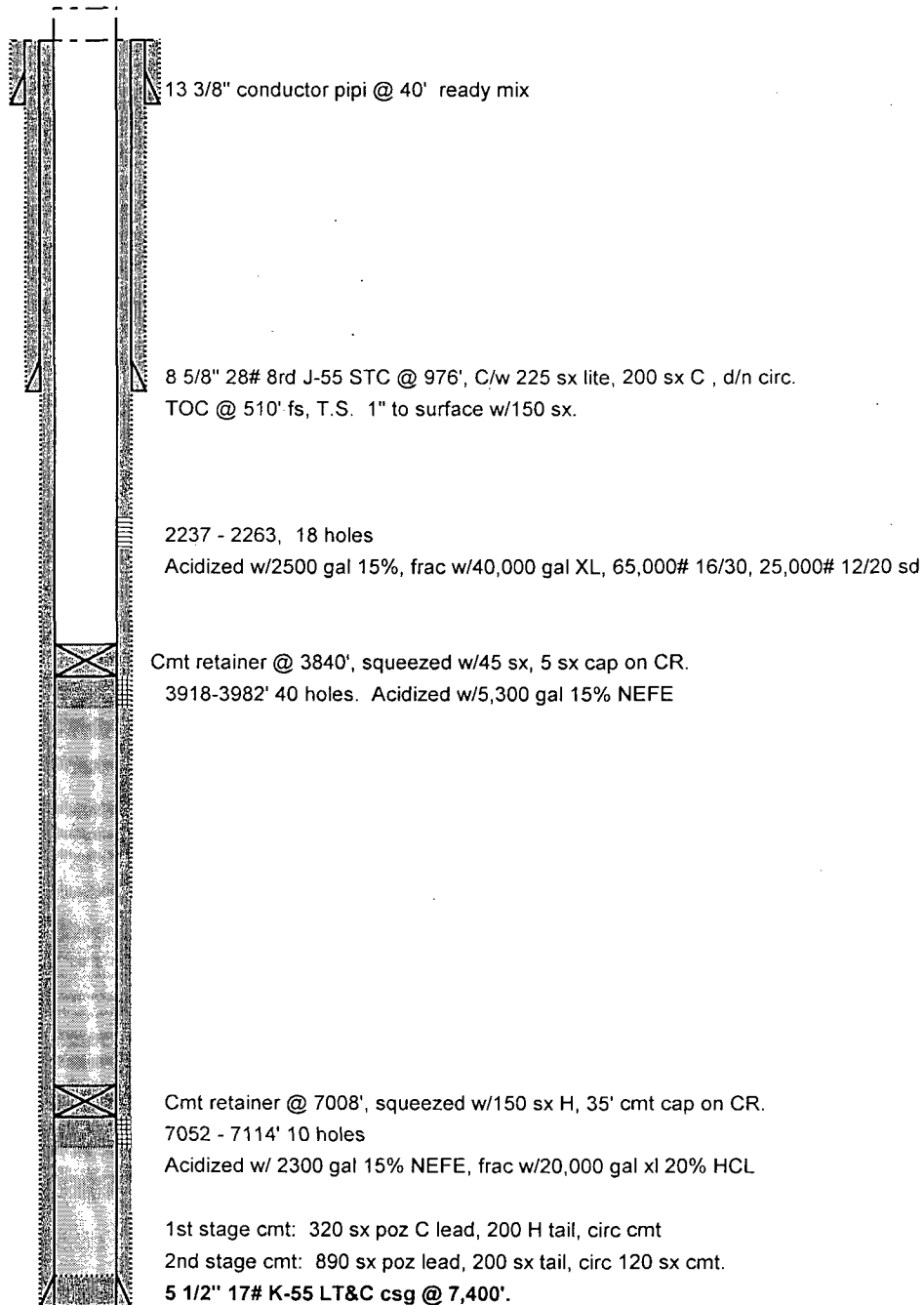
ACTIVE

SPUD - 7-26-1983

Eddy Co., NM

Sec 25 A T17S R28E 330 FNL & 330 FEL

Elevation - 3663'



PI/Dwights PLUS on CD Well Summary Report

Production Perforation										
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2776	2776		PERF	453SADR	453SADR	A	1		
001	2778	2778		PERF	453SADR	453SADR	A	1		
001	2804	2804		PERF	453SADR	453SADR	A	1		
001	2818	2818		PERF	453SADR	453SADR	A	1		
001	2829	2829		PERF	453SADR	453SADR	A	1		
001	2840	2840		PERF	453SADR	453SADR	A	1		
001	2854	2854		PERF	453SADR	453SADR	A	1		
001	2875	2875		PERF	453SADR	453SADR	A	1		
001	2890	2890		PERF	453SADR	453SADR	A	1		
001	2905	2905		PERF	453SADR	453SADR	A	1		
001	2912	2912		PERF	453SADR	453SADR	A	1		
001	2927	2927		PERF	453SADR	453SADR	A	1		
001	2939	2939		PERF	453SADR	453SADR	A	1		
001	2941	2941		PERF	453SADR	453SADR	A	1		
001	2951	2951		PERF	453SADR	453SADR	A	1		
001	2965	2965		PERF	453SADR	453SADR	A	1		
001	2970	2970		PERF	453SADR	453SADR	A	1		
001	2986	2986		PERF	453SADR	453SADR	A	1		
001	2992	2992		PERF	453SADR	453SADR	A	1		
001	3004	3004		PERF	453SADR	453SADR	A	1		
001	3010	3010		PERF	453SADR	453SADR	A	1		
001	3019	3019		PERF	453SADR	453SADR	A	1		
001	3029	3029		PERF	453SADR	453SADR	A	1		
001	3063	3063		PERF	453SADR	453SADR	A	1		
001	3067	3067		PERF	453SADR	453SADR	A	1		
001	3077	3077		PERF	453SADR	453SADR	A	1		
001	3083	3083		PERF	453SADR	453SADR	A	1		
001	3088	3088		PERF	453SADR	453SADR	A	1		

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454SALT	SALT	450		550		LOG	
453YTES	YATES	780				LOG	
453SVRV	SEVEN RIVERS	960				LOG	
453QUEN	QUEEN	1550				LOG	
453GRBG	GRAYBURG	1960				LOG	
453SADR	SAN ANDRES D	2224				LOG	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
1	LLD				
1	GR	435	3200		
1	NEC	435	3200		
1	DNCP	435	3200		
1	GR	1600	3412		
1	CCL	1600	3412		

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	428	325 SACK

PI/Dwights PLUS on CD Well Summary Report



5 1/2 IN 3446 850 SACK

Tubing Data

Size	Base Depth	Mixed String
2 3/8 IN	3104	

Dwights Energydata Narrative

Accumulated through 1997

Dwights number:



PI/Dwights PLUS on CD Well Summary Report

		General Information			
State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	3148
Field	:	RED LAKE	Log Total Depth	:	
Operator Name	:	S D X RESOURCES INC <i>line</i>	True Vertical Depth	:	
Lease Name	:	MARATHON 25 STATE		:	
Well Number	:	24	Spud Date	:	MAY 08, 2006
API Number	:	30015345850000	Comp Date	:	JUN 27, 2006
Regulatory API	:	3001534585		:	
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	
Permit Number	:		Ground Elevation	:	3679
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453SADR		:	
Oldest Age Pen	:	453		:	
Producing Formation	:	453SADR		:	
Township	:	17 S	Section	:	25 SEC
Range	:	28 E	Spot	:	NE NW NE
Base Meridian	:	NEW MEXICO		:	

		Additional Location Information			
Footage Location	:	480 FNL 1650 FEL CONGRESS SECTION			
Latitude	:	32.8125500	Latitude (Bot)	:	
Longitude	:	-104.1256300	Longitude (Bot)	:	
Lat./Long. Source	:	TS		:	
Location Narrative	:	Type	Remark	:	
	:	SCALED_FOOT	REGULATORY	:	
	:	IRREG_SECT	N	:	

		Initial Potential Tests			
Test	Top	Base	Top	Base	
	Form	Form	Depth	Depth	
001	453SADR	453SADR	2371	2722	
		IP Volume			
Test	Amount	Oil	Cond	Gas	Wtr
		Unit	Unit	Unit	Unit
001	28	BPD		169	150
				MCFD	BBL
		IP Treatment			
Test	Top	Base	Volume	Meas	Amount
					T/P
001	2371	2722	3700	GAL	
001	2371	2722	53000	GAL	115000
					LB
		IP Perforation			
Test	Top	Base	Type	Method	Top Form
					Base Form
001	2371	2371		PERF	453SADR
001	2373	2373		PERF	453SADR
001	2389	2389		PERF	453SADR
001	2405	2405		PERF	453SADR
001	2443	2443		PERF	453SADR
001	2445	2445		PERF	453SADR
001	2605	2605		PERF	453SADR
001	2607	2607		PERF	453SADR
001	2615	2615		PERF	453SADR
001	2616	2616		PERF	453SADR
001	2623	2623		PERF	453SADR
001	2633	2633		PERF	453SADR

PI/Dwights PLUS on CD Well Summary Report

001	2643	2643	PERF	453SADR	453SADR	1	FT
001	2650	2650	PERF	453SADR	453SADR	1	FT
001	2663	2663	PERF	453SADR	453SADR	1	FT
001	2670	2670	PERF	453SADR	453SADR	1	FT
001	2679	2679	PERF	453SADR	453SADR	1	FT
001	2682	2682	PERF	453SADR	453SADR	1	FT
001	2686	2686	PERF	453SADR	453SADR	1	FT
001	2691	2691	PERF	453SADR	453SADR	1	FT
001	2700	2700	PERF	453SADR	453SADR	1	FT
001	2702	2702	PERF	453SADR	453SADR	1	FT
001	2704	2704	PERF	453SADR	453SADR	1	FT
001	2710	2710	PERF	453SADR	453SADR	1	FT
001	2716	2716	PERF	453SADR	453SADR	1	FT
001	2720	2720	PERF	453SADR	453SADR	1	FT
001	2722	2722	PERF	453SADR	453SADR	1	FT

Core Data

Formation	Top Depth	Base Depth	Recovered	Type	Show
	2088	3057		SDWL	

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	416	375	SACK
5 1/2 IN	3147	575	SACK

Tubing Data

Size	Base Depth	Mixed String
2 7/8 IN	2836	

PI/Dwights PLUS on CD Well Summary Report

	General Information			
State	:	NEW MEXICO	Final Status	: OIL
County	:	EDDY	Drill Total Depth	: 3500
Field	:	RED LAKE	Log Total Depth	:
Operator Name	:	LIME ROCK RES A LP	True Vertical Depth	:
Lease Name	:	MARATHON 25 STATE		
Well Number	:	27	Spud Date	: OCT 22, 2008
API Number	:	30015364220000	Comp Date	: DEC 16, 2008
Regulatory API	:	3001536422		
Init Lahee Class	:	D	Hole Direction	: VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:
Permit Number	:		Ground Elevation	: 3677
Geologic Province	:	PERMIAN BASIN	KB Elevation	:
Formation at TD	:	453SADR		
Oldest Age Pen	:	453		
Producing Formation	:	453SADRU		
Township	:	17 S	Section	: 25 SEC
Range	:	28 E	Spot	: SW NE NE
Base Meridian	:	NEW MEXICO		

Additional Location Information

Footage Location	:	990 FNL 990 FEL CONGRESS SECTION	
Latitude	:	32.8111300	Latitude (Bot)
Longitude	:	-104.1242300	Longitude (Bot)
Lat./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	453SADRU	453SADRL	2783	3310				PERF	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001			UO				27	MCFD				

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2783	3029	3034	GAL					ACID			NEFE
001	2783	3029			119788	LB			FRAC		SAND	
001	3078	3310	4000	GAL					ACID			NEFE
001	3078	3310			130000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2783	2783		PERF	453SADRU	453SADRU			1	FT
001	2814	2814		PERF	453SADRU	453SADRU			1	FT
001	2842	2842		PERF	453SADRU	453SADRU			1	FT
001	2846	2846		PERF	453SADRU	453SADRU			1	FT
001	2864	2864		PERF	453SADRU	453SADRU			1	FT
001	2865	2865		PERF	453SADRU	453SADRU			1	FT
001	2866	2866		PERF	453SADRU	453SADRU			1	FT
001	2873	2873		PERF	453SADRU	453SADRU			1	FT
001	2874	2874		PERF	453SADRU	453SADRU			1	FT
001	2875	2875		PERF	453SADRU	453SADRU			1	FT

PI/Dwights PLUS on CD Well Summary Report

001	2876	2876	PERF	453SADRU	453SADRU	1	FT
001	2881	2881	PERF	453SADRU	453SADRU	1	FT
001	2882	2882	PERF	453SADRU	453SADRU	1	FT
001	2883	2883	PERF	453SADRU	453SADRU	1	FT
001	2884	2884	PERF	453SADRU	453SADRU	1	FT
001	2885	2885	PERF	453SADRU	453SADRU	1	FT
001	2886	2886	PERF	453SADRU	453SADRU	1	FT
001	2887	2887	PERF	453SADRU	453SADRU	1	FT
001	2888	2888	PERF	453SADRU	453SADRU	1	FT
001	2893	2893	PERF	453SADRU	453SADRU	1	FT
001	2894	2894	PERF	453SADRU	453SADRU	1	FT
001	2894	2894	PERF	453SADRU	453SADRU	1	FT
001	2896	2896	PERF	453SADRU	453SADRU	1	FT
001	2938	2938	PERF	453SADRU	453SADRU	1	FT
001	2939	2939	PERF	453SADRU	453SADRU	1	FT
001	2940	2940	PERF	453SADRU	453SADRU	1	FT
001	2941	2941	PERF	453SADRU	453SADRU	1	FT
001	2942	2942	PERF	453SADRU	453SADRU	1	FT
001	2943	2943	PERF	453SADRU	453SADRU	1	FT
001	2944	2944	PERF	453SADRU	453SADRU	1	FT
001	2945	2945	PERF	453SADRU	453SADRU	1	FT
001	2946	2946	PERF	453SADRU	453SADRU	1	FT
001	2947	2947	PERF	453SADRU	453SADRU	1	FT
001	2948	2948	PERF	453SADRU	453SADRU	1	FT
001	2949	2949	PERF	453SADRU	453SADRU	1	FT
001	2969	2969	PERF	453SADRU	453SADRU	1	FT
001	2980	2980	PERF	453SADRU	453SADRU	1	FT
001	2981	2981	PERF	453SADRU	453SADRU	1	FT
001	2982	2982	PERF	453SADRU	453SADRU	1	FT
001	2988	2988	PERF	453SADRU	453SADRU	1	FT
001	2996	2996	PERF	453SADRU	453SADRU	1	FT
001	3012	3012	PERF	453SADRU	453SADRU	1	FT
001	3018	3018	PERF	453SADRU	453SADRU	1	FT
001	3027	3027	PERF	453SADRU	453SADRU	1	FT
001	3028	3028	PERF	453SADRU	453SADRU	1	FT
001	3029	3029	PERF	453SADRU	453SADRU	1	FT
001	3078	3078	PERF	453SADRL	453SADRL	1	FT
001	3080	3080	PERF	453SADRL	453SADRL	1	FT
001	3081	3081	PERF	453SADRL	453SADRL	1	FT
001	3082	3082	PERF	453SADRL	453SADRL	1	FT
001	3089	3089	PERF	453SADRL	453SADRL	1	FT
001	3090	3090	PERF	453SADRL	453SADRL	1	FT
001	3091	3091	PERF	453SADRL	453SADRL	1	FT
001	3092	3092	PERF	453SADRL	453SADRL	1	FT
001	3093	3093	PERF	453SADRL	453SADRL	1	FT
001	3094	3094	PERF	453SADRL	453SADRL	1	FT
001	3119	3119	PERF	453SADRL	453SADRL	1	FT
001	3122	3122	PERF	453SADRL	453SADRL	1	FT
001	3165	3165	PERF	453SADRL	453SADRL	1	FT
001	3169	3169	PERF	453SADRL	453SADRL	1	FT
001	3170	3170	PERF	453SADRL	453SADRL	1	FT
001	3171	3171	PERF	453SADRL	453SADRL	1	FT

PI/Dwights PLUS on CD Well Summary Report

001	3172	3172	PERF	453SADRL	453SADRL	1	FT
001	3173	3173	PERF	453SADRL	453SADRL	1	FT
001	3174	3174	PERF	453SADRL	453SADRL	1	FT
001	3175	3175	PERF	453SADRL	453SADRL	1	FT
001	3176	3176	PERF	453SADRL	453SADRL	1	FT
001	3177	3177	PERF	453SADRL	453SADRL	1	FT
001	3178	3178	PERF	453SADRL	453SADRL	1	FT
001	3184	3184	PERF	453SADRL	453SADRL	1	FT
001	3189	3189	PERF	453SADRL	453SADRL	1	FT
001	3190	3190	PERF	453SADRL	453SADRL	1	FT
001	3191	3191	PERF	453SADRL	453SADRL	1	FT
001	3192	3192	PERF	453SADRL	453SADRL	1	FT
001	3193	3193	PERF	453SADRL	453SADRL	1	FT
001	3249	3249	PERF	453SADRL	453SADRL	1	FT
001	3267	3267	PERF	453SADRL	453SADRL	1	FT
001	3273	3273	PERF	453SADRL	453SADRL	1	FT
001	3282	3282	PERF	453SADRL	453SADRL	1	FT
001	3283	3283	PERF	453SADRL	453SADRL	1	FT
001	3284	3284	PERF	453SADRL	453SADRL	1	FT
001	3285	3285	PERF	453SADRL	453SADRL	1	FT
001	3286	3286	PERF	453SADRL	453SADRL	1	FT
001	3290	3290	PERF	453SADRL	453SADRL	1	FT
001	3295	3295	PERF	453SADRL	453SADRL	1	FT
001	3301	3301	PERF	453SADRL	453SADRL	1	FT
001	3307	3307	PERF	453SADRL	453SADRL	1	FT
001	3308	3308	PERF	453SADRL	453SADRL	1	FT
001	3309	3309	PERF	453SADRL	453SADRL	1	FT
001	3310	3310	PERF	453SADRL	453SADRL	1	FT

Formations

Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453QUEN	QUEEN	1559				LOG	
453GRBG	GRAYBURG	1966				LOG	
453SADR	SAN ANDRES	2267				LOG	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
1	IL				
1	DENL				
1	N				
1	CBL				

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	419	375 SACK
5 1/2 IN	3483	1000 SACK

Tubing Data**Mixed String**

Size	Base Depth
8 5/8 IN	3318

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL-WO
County	: EDDY	Drill Total Depth	: 3510
Field	: RED LAKE	Log Total Depth	:
Operator Name	: S.D.X. RESOURCES INC <i>Line Book</i>	True Vertical Depth	:
Lease Name	: MARATHON A 25 STATE		
Well Number	: 12	Spud Date	: MAY 11, 2004
API Number	: 30015306820001	Comp Date	: JUN 20, 2004
Regulatory API	:		
Init Lahee Class	: D X	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	:
Permit Number	:	Ground Elevation	: 3693
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453ADR SAN ANDRES		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	: 453ADR SAN ANDRES		
Township	: 17 S	Section	: 25 SEC
Range	: 28 E	Spot	: NE SW NE
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 1650 FNL 1650 FEL CONGRESS SECTION		
Latitude	: 32.8092900	Latitude (Bot)	:
Longitude	: -104.1263800	Longitude (Bot)	:
Lat./Long. Source	: TS		
Location Narrative	: Type	Remark	
	: DST_TOWN	: 10 MI W LOCO HILLS, NM	
	: 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	453ADR	453ADR	2236	2257				PERF	PUMPING

IP Volume

Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	2	BPD					5	MCFD			185	BBL

IP Treatment

Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2236	2257	2500	GAL					ACID			NECL
001	2236	2257	40000	GAL	108000	LB			FRAC		SAND	

IP Perforation

Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
001	2236	2236		PERF	453ADR	453ADR				
001	2238	2238		PERF	453ADR	453ADR				
001	2240	2240		PERF	453ADR	453ADR				
001	2244	2244		PERF	453ADR	453ADR				
001	2246	2246		PERF	453ADR	453ADR				
001	2248	2248		PERF	453ADR	453ADR				
001	2255	2255		PERF	453ADR	453ADR				
001	2257	2257		PERF	453ADR	453ADR		16		

Tubing Data

Size	Base Depth	Mixed String
------	------------	--------------

PI/Dwights PLUS on CD Well Summary Report

2 3/8 IN

2283

PL/Dwights PLUS on CD Well Summary Report

					
General Information					
State	:	NEW MEXICO	Final Status	:	OIL
County	:	EDDY	Drill Total Depth	:	3505
Field	:	RED LAKE	Log Total Depth	:	
Operator Name	:	S D X RESOURCES INC	True Vertical Depth	:	
Lease Name	:	MARATHON 'A25' STATE			
Well Number	:	14	Spud Date	:	DEC 06, 1999
API Number	:	30015308250000	Comp Date	:	FEB 02, 2000
Regulatory API	:				
Init Lahee Class	:	D	Hole Direction	:	VERTICAL
Final Lahee Class	:	DO	Reference Elevation	:	
Permit Number	:		Ground Elevation	:	3671
Geologic Province	:	PERMIAN BASIN	KB Elevation	:	
Formation at TD	:	453ADR	SAN ANDRES		
Oldest Age Pen	:	453	PERMIAN GUADALUPIAN		
Producing Formation	:	453ADR	SAN ANDRES		
Township	:	17 S	Section	:	25 SEC
Range	:	28 E	Spot	:	NE SE NE
Base Meridian	:	NEW MEXICO			

Additional Location Information			
Footage Location	:	1650 FNL 330 FEL CONGRESS SECTION	
Latitude	:	32.8093300	Latitude (Bot) :
Longitude	:	-104.1220900	Longitude (Bot) :
Lat/Long. Source	:	TS	
Location Narrative	:	Type	Remark
		DST_TOWN	10 MI W LOCO HILLS, NM
		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	453SADR	453SADR	2686	3001		833			PUMPING			
IP Volume												
Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001	6	BPD					5	MCFD		110	BBL	

Production Tests												
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	Oil GOR	Prod Grav	Test Method	Test Method			
001	453SADR	453SADR	2686	3001				PERF				
Production Volume												
Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc
001												

Production Treatment												
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add
001	2686	3001	53000	GAL	130000	LB			FRAC		SAND	
001	2686	3001	4000	GAL					ACID			

	Production Perforation										
	Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per
	001	2686	2686		PERF	453SADR	453SADR	A		1	FT
	001	2688	2688		PERF	453SADR	453SADR	A		1	FT

PI/Dwights PLUS on CD Well Summary Report

001	2697	2697	PERF	453SADR	453SADR	A	1	FT
001	2704	2704	PERF	453SADR	453SADR	A	1	FT
001	2720	2720	PERF	453SADR	453SADR	A	1	FT
001	2724	2724	PERF	453SADR	453SADR	A	1	FT
001	2735	2735	PERF	453SADR	453SADR	A	1	FT
001	2739	2739	PERF	453SADR	453SADR	A	1	FT
001	2750	2750	PERF	453SADR	453SADR	A	1	FT
001	2766	2766	PERF	453SADR	453SADR	A	1	FT
001	2788	2788	PERF	453SADR	453SADR	A	1	FT
001	2819	2819	PERF	453SADR	453SADR	A	1	FT
001	2827	2827	PERF	453SADR	453SADR	A	1	FT
001	2842	2842	PERF	453SADR	453SADR	A	1	FT
001	2861	2861	PERF	453SADR	453SADR	A	1	FT
001	2867	2867	PERF	453SADR	453SADR	A	1	FT
001	2876	2876	PERF	453SADR	453SADR	A	1	FT
001	2881	2881	PERF	453SADR	453SADR	A	1	FT
001	2905	2905	PERF	453SADR	453SADR	A	1	FT
001	2931	2931	PERF	453SADR	453SADR	A	1	FT
001	2960	2960	PERF	453SADR	453SADR	A	1	FT
001	2966	2966	PERF	453SADR	453SADR	A	1	FT
001	2983	2983	PERF	453SADR	453SADR	A	1	FT
001	3001	3001	PERF	453SADR	453SADR	A	1	FT

Formations

Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
454RSLR	RUSTLER	200				LOG	
454SALT	SALT	480		620		LOG	
453YTES	YATES	720				LOG	
453SVRV	SEVEN RIVERS	1004				LOG	
453QUEN	QUEEN	1510				LOG	
453GRBG	GRAYBURG	1920				LOG	
453SADR	SAN ANDRES	2300				LOG	

Log Data

Run No	Log Type	Top	Base	Log MD	Max Temp
1	CNL				
1	GR				
1	CCL				

Mud Data

Depth	Weight	Unit
3505	9.9	PPG

Casing Data

Size	Base Depth	Cement	Unit
8 5/8 IN	420	325	SACK
5 1/2 IN	3496	975	SACK

Tubing Data

Size	Base Depth
2 3/8 IN	3029

PI/Dwights PLUS on CD Well Summary Report

General Information			
State	: NEW MEXICO	Final Status	: OIL
County	: EDDY	Drill Total Depth	: 2385
Field	: ARTESIA <i>macik</i>	Log Total Depth	:
Operator Name	: SHENANDOAH OIL CORP	True Vertical Depth	:
Lease Name	: FIVE J		
Well Number	: 1	Spud Date	: MAR 12, 1965
API Number	: 30015104800000	Comp Date	: APR 21, 1965
Regulatory API	:		
Init Lahee Class	: D	Hole Direction	: VERTICAL
Final Lahee Class	: DO	Reference Elevation	: 3668 ES
Permit Number	:	Ground Elevation	:
Geologic Province	: PERMIAN BASIN	KB Elevation	:
Formation at TD	: 453SADRD SAN ANDRES D		
Oldest Age Pen	: 453 PERMIAN GUADALUPIAN		
Producing Formation	: 453GRBG GRAYBURG		
Township	: 17 S	Section	: 25 SEC
Range	: 28 E	Spot	:
Base Meridian	: NEW MEXICO		

Additional Location Information			
Footage Location	: 1650 FSL 330 FEL CONGRESS SECTION		
Latitude	: 32.8037800	Latitude (Bot)	:
Longitude	: -104.1221400	Longitude (Bot)	:
Lat./Long. Source	: TS		

Initial Potential Tests									
Test	Top Form	Base Form	Top Depth	Base Depth	Choke	GOR	Oil Grav	Prod Method	Test Method
001	453GRBG	453GRBG	2338	2343	24/64			PERF	FLOWING

IP Volume													
Test	Amount	Oil Unit	Desc	Amount	Cond Unit	Desc	Amount	Gas Unit	Desc	Amount	Wtr Unit	Desc	
001	43	BPD											

IP Pressure				
Test	FTP	SITP	FCP	SICP
001			260	

IP Treatment													
Test	Top	Base	Volume	Meas	Amount	T/P	PSI	Inj	Type	Nbr	Agent	Add	
001	2338	2343	630	BBL	30000	LB			FRAC		SAND		

IP Perforation													
Test	Top	Base	Type	Method	Top Form	Base Form	Status	Count	Density	Per			
001	2338	2343		PERF	453GRBG	453GRBG	A						

Formations							
Form Code	Form Name	Top Depth	Top TVD	Base Depth	Base TVD	Source	Lithology
453YTES	YATES	802				LOG	
453QUEN	QUEEN	1640				LOG	
453GRBG	GRAYBURG	2053				LOG	
453SADRD	SAN ANDRES D	2361				LOG	
453ALT	SALT			602		LOG	

Log Data					
Run No	Log Type	Top	Base	Log MD	Max Temp

PI/Dwights PLUS on CD Well Summary Report

01 NE

Casing Data

Size	Base Depth	Cement Unit
8 5/8 IN	407	50 SACK
5 1/2 IN	2385	150 SACK

MARBOB ENERGY CORP.

Lease & Well # N B Tween State #1

Active

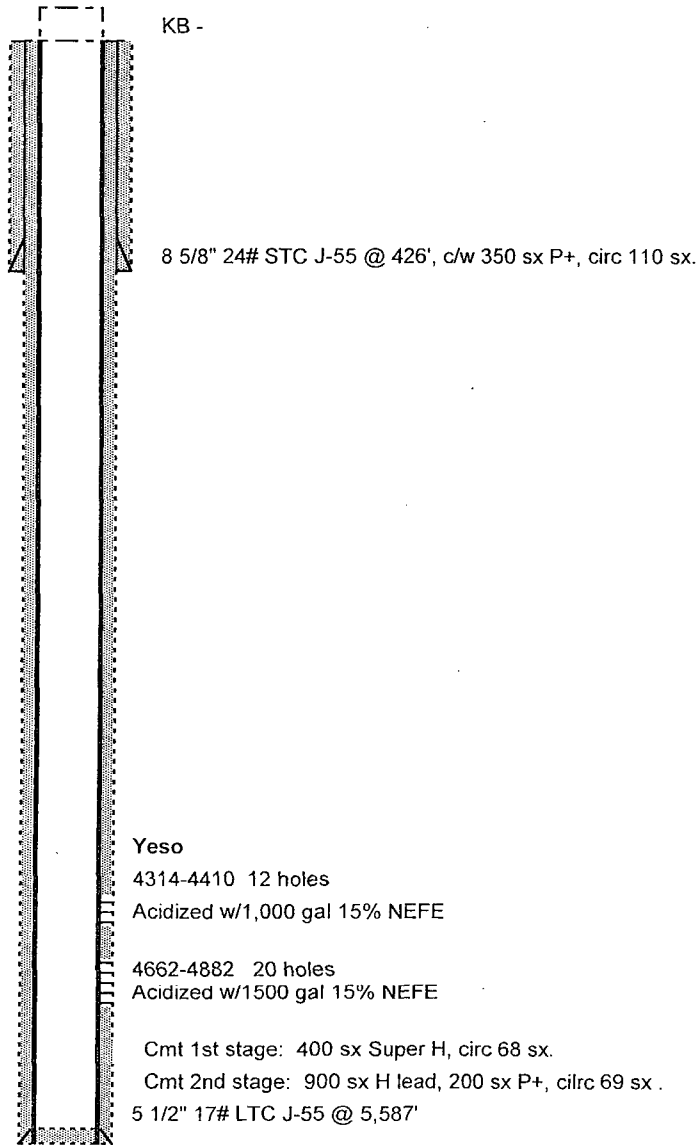
30 015 35915

Eddy Co., NM

Spud - 2/13/2008

Sec 25 H, T17S, R28E, 2310 FNL & 990 FEL

Elevation - 3676 GR



SH

Marbob Energy Corporation

Lease & Well # N B Tween State #8

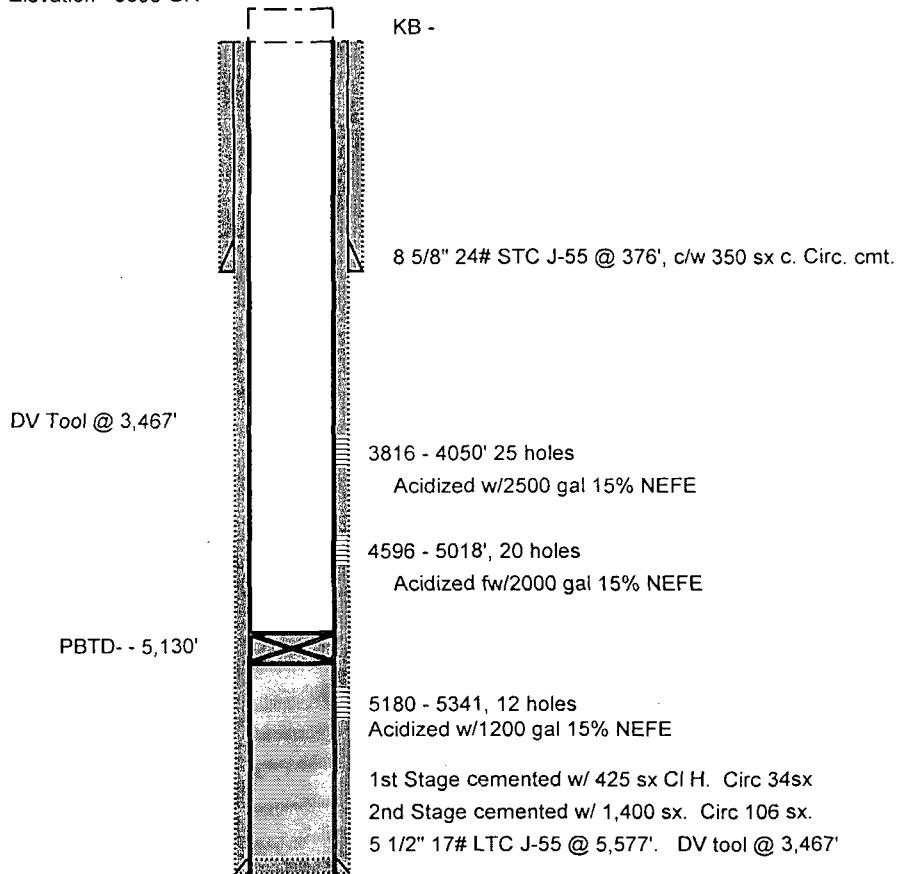
3001536796

Eddy Co., NM

Spud - 3/20/2009

Sec 25 G, T17S, R28E, 1850 FNL & 1650 FEL

Elevation - 3696 GR



MARBOB ENERGY CORP.

Lease & Well # N B Tween State #11

Active

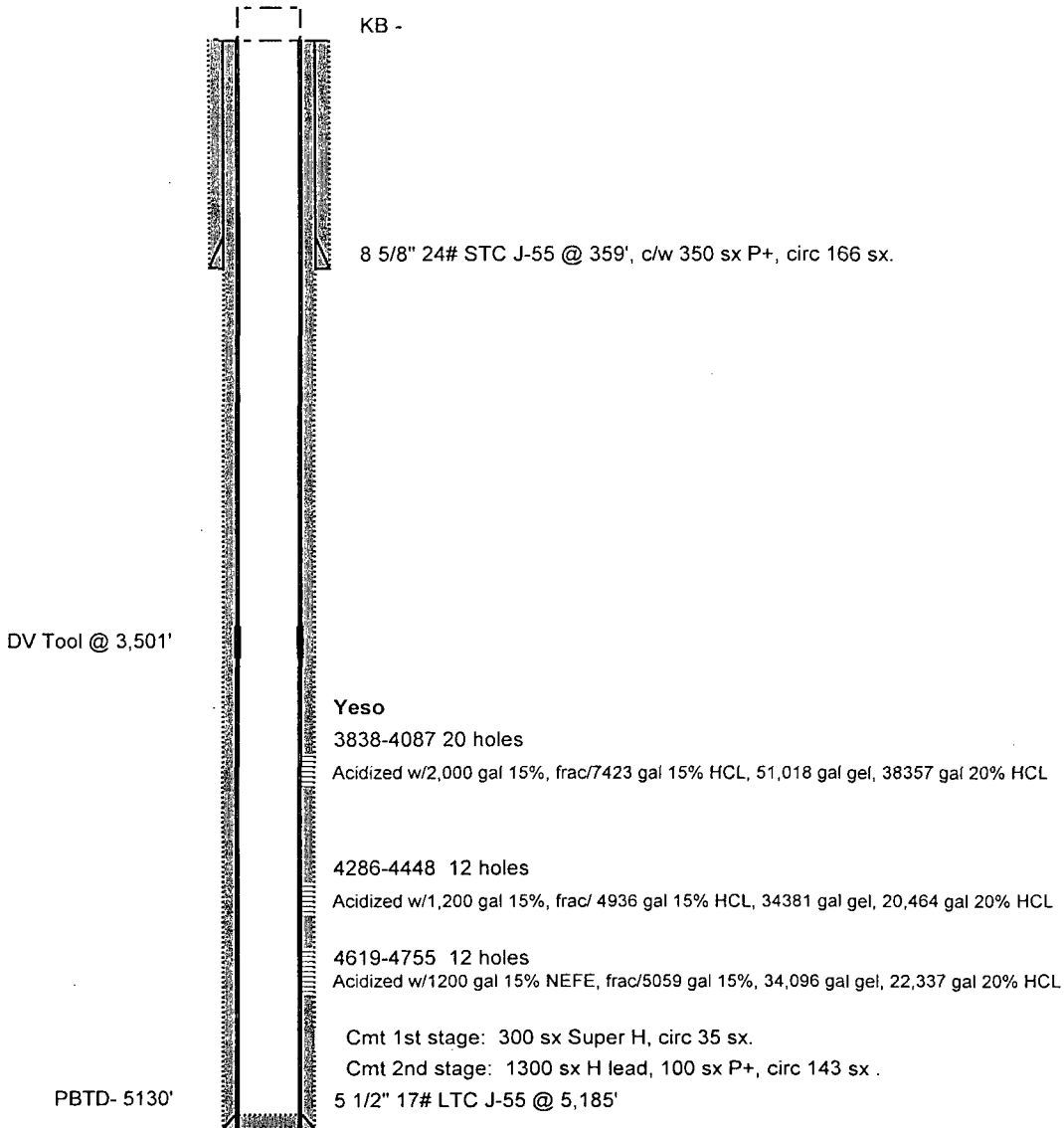
30 015 36789

Eddy Co., NM

Spud - 5/15/2009

Sec 25 H, T17S, R28E, 1810 FNL & 330 FEL

Elevation - 3672 GR



MARBOB ENERGY CORP.

Lease & Well # State D #21

30 015 30975

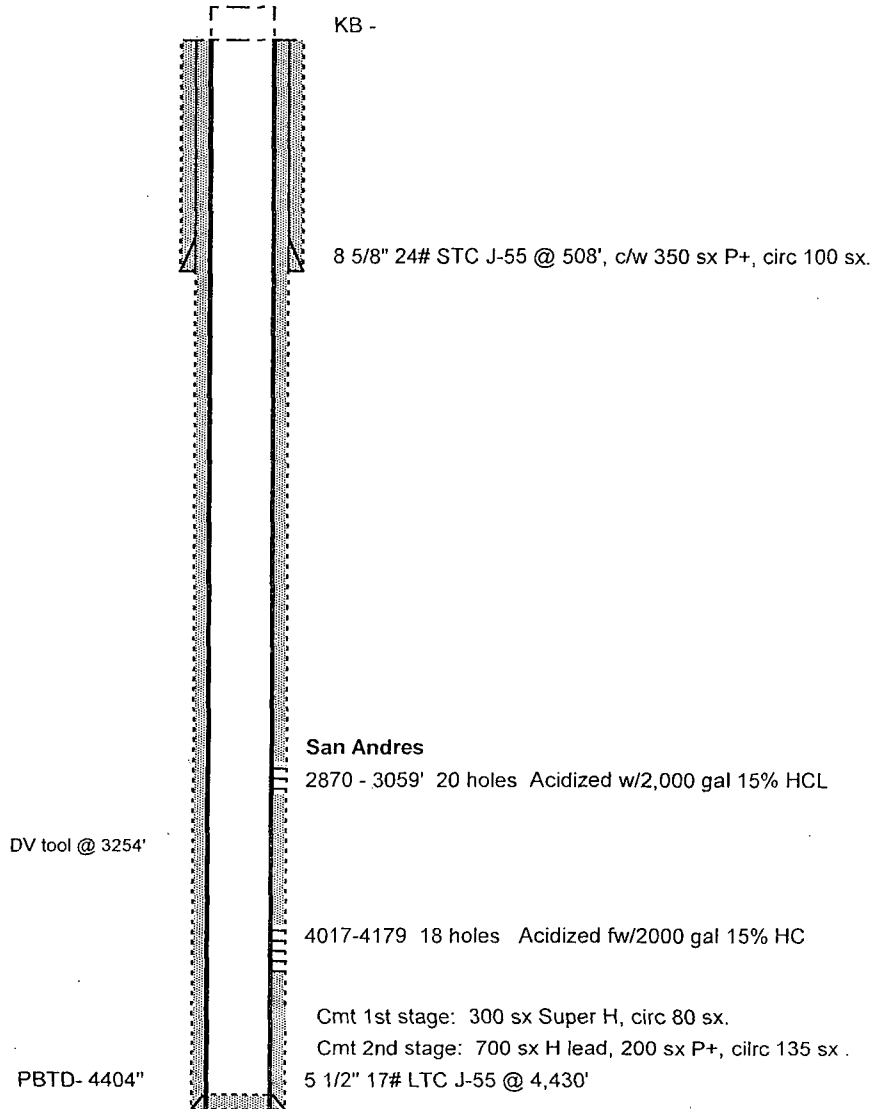
Spud - 6/5/2000

Elevation - 3664 GR

Active

Eddy Co., NM

Sec 25 I, T17S, R28E, 2310 FSL & 330 FEL



MEWBOURNE OIL CO.

Lease & Well #
30 015 31140

Empire 25 State #1

ACTIVE

Eddy Co., Nm

Sec 25 G T17S R28E 1980 FNL & 1980 FEL

SPUD - 5/23/2000

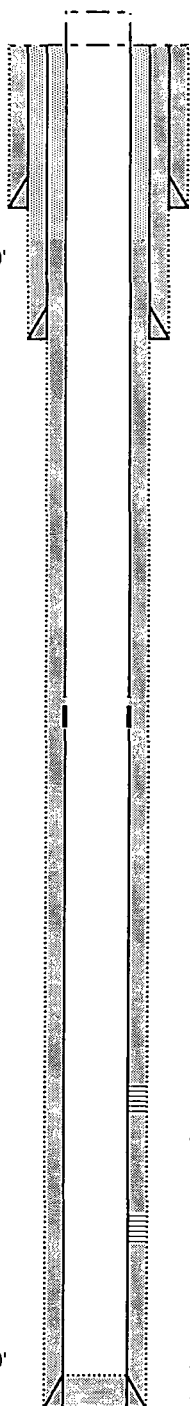
Elevation - 3691

KB -

TOC @ 1,100'

DV tool - N/A

PBTD- 10,440'



13 3/8" 48# H-40 @ 365', 160 sx lite, 200 sx C, 2% CC, Circ 73 sx.

8 5/8" 32# 8rd J-55 STC @ 2605', 975 sx lite, 200 CL C, circ 105 sx.

Atoka

10,267 - 10,288'

Acidized w/500 gal, frac w/40,000 gal gel, 30,500# 20/40 interprop

Morrow

10,547 - 560'

Acidized w/1500 gal 7 1/2% HCL, lfrac w/70,000 gal 70Q Binary w/70,000# 20/40 int.prop

1st stage: 800 sx Super H, circ 113 Sx.

2nd stage: 875 35/65/6 lite, 100 50/50/2 C tail. TOC @ 1,100'

5 1/2" 17# N-80 LTC csg @ 10,851'.

VII.

COG Operating, LLC
Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
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 #: 6516
Area: Artesia Analysis ID #: 164
Lease: CONTINENTAL A STATE
Location: 11 0
Sample Point: Wellhead

		mg/l		meq/l	mg/l		meq/l
Sampling Date:	10/18/2006	Anions			Cations		
Analysis Date:	10/20/2006	Chloride:	113124.0	3190.82	Sodium:	58897.3	2561.89
Analyst:	Mitchell Labs	Bicarbonate:	146.6	2.4	Magnesium:	1478.6	121.64
TDS (mg/l or g/m3):	185158.2	Carbonate:			Calcium:	10532.4	525.57
Density (g/cm3):	1.129	Sulfate:	900.0	18.74	Strontium:		
Hydrogen Sulfide:	9				Barium:		
Carbon Dioxide:	35				Iron:	77.6	2.8
Comments:					Manganese:	1.710	0.06
		pH at time of sampling:		6.8			
		pH at time of analysis:					
		pH used in Calculation:		6.8	Conductivity (micro-ohms/cm):		355000
		Temperature @ lab conditions (F):		75	Resistivity (ohm meter):		.0282

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	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.68	9.67	-0.13	0.00	-0.12	0.00	0.00	0.00	0.00	0.00
100	0.73	11.13	-0.20	0.00	-0.12	0.00	0.00	0.00	0.00	0.00
120	0.78	12.60	-0.26	0.00	-0.09	0.00	0.00	0.00	0.00	0.00
140	0.82	14.07	-0.30	0.00	-0.05	0.00	0.00	0.00	0.00	0.00



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 #: 7681
Area: Artesia Analysis ID #: 341
Lease: CONTINENTAL A STATE
Location: 11 0
Sample Point: Wellhead

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	5/8/2007	Chloride:	109721.0	Sodium:	59960.3
Analysis Date:	5/9/2007	Bicarbonate:	20.8	Magnesium:	1567.0
Analyst:	Mitchell Labs	Carbonate:		Calcium:	7814.9
TDS (mg/l or g/m3):	180646.4	Sulfate:	1550.0	Strontium:	
Density (g/cm3):	1.126			Barium:	
Hydrogen Sulfide:	27			Iron:	11.9
Carbon Dioxide:	110			Manganese:	0.510
Comments:		pH at time of sampling:	6		
		pH at time of analysis:			
		pH used in Calculation:	6		
		Temperature @ lab conditions (F):	78	Conductivity (micro-ohms/cm):	205200
				Resistivity (ohm meter):	.0487

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		
80		-1.07	0.00	0.00	0.01	18.83	0.00	0.00	0.00	0.00	
100		-0.98	0.00	-0.07	0.00	0.01	14.42	0.00	0.00	0.00	0.00
120		-0.89	0.00	-0.13	0.00	0.03	46.20	0.00	0.00	0.00	0.00
140		-0.80	0.00	-0.18	0.00	0.08	105.35	0.00	0.00	0.00	0.00



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #11
DIVISION: NEW MEXICO
EVENT: 50
ELD : EMPIRE
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-34742
PLAN DEPTH :
SPUD DATE : 08/14/2006
DHC : CWC :
AFE TOTAL :
FORMATION: YESO
REPORT DATE: 08/14/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

MIRU Silver Oak 2. Working on Rig

REPORT DATE: 08/15/2006 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 5:30pm, 8/15/2006. TD 17 1/2" hole at 325', Ran 8Jts. 13 3/8", H-40, 48#, ST&C, 323', Cement with 425sx Class"C"+2%CaCl2, Plug down at 4:40am., 8/15/2006. Circ. 102sx..

REPORT DATE: 08/16/2006 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 619' Ftg made 294' MW 9.3 Vis 29 pH 10

REPORT DATE: 08/17/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

TD 12 1/4 hole at 805', Ftg made 186', Ran 18Jts. 8 5/8", J-55, 24#, ST&C, 803', Cement with 425sx 35/65/6"C", 200sx Class"C"+2%CaCl2, Plug down at 6:15pm. 8/16/2006. Circ. 88sx.

REPORT DATE: 08/18/2006 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 1466', Ftg made 661', Nipped up and Tested BOP, Drilled out with motor, Ran Gyro, Last survey 1369'-11.46deg., AZ 179

REPORT DATE: 08/19/2006 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 2300', Ftg made 834', MW 9.2, Vis 29, PH 10.5, Last survey 2215'-8.75deg., AZ 183

REPORT DATE: 08/20/2006 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 2862', Ftg made 562', MW 9.2, Vis 29, PH 10, Last survey at 2772'-1.39deg.

REPORT DATE: 08/21/2006 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 3580', Ftg made 718', Survey at 3455'-1.19deg.

REPORT DATE: 08/22/2006 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 4201', Ftg made 621', MW 9.4, Vis 29, PH 10, Last survey at 3865'-.91deg.



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #11
DIVISION: NEW MEXICO
EVENT: 50
FIELD: EMPIRE
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-34742
PLAN DEPTH :
SPUD DATE : 08/14/2006
DHC : CWC :
AFE TOTAL :
FORMATION: YESO
REPORT DATE: 08/23/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth 4268', Tripped out for bit, Collars got hung up in curve, Picked up driving tool and knocked it loose. Trip out, change out bit and motor, picked up RT tool to clean up curve.

REPORT DATE: 08/24/2006 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 4830', Ftg made 562',

REPORT DATE: 08/25/2006 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 5390', Ftg made 590', MW 9.3, Vis 29, WL 14, Ph 10 Survey at 5267'-.88deg.

REPORT DATE: 08/26/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Circ and condition hole at 5557' ftg made 167' Logs td at 5350'

REPORT DATE: 08/27/2006 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 5667' drlg another 200'

REPORT DATE: 08/28/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Logging at 5757' loggers td at 5718'

REPORT DATE: 08/29/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Ran 127 jts 5 1/2 J-55 LT&C 5731'C/w 400 sx 50/50/ 2 C+ plug down at 10:00pm 8/28/06 circ 120 sx. Circ 6 hours. 2nd stage 200 sx 35/65/6. 790sx 50/502 C+ plug down at 6:45 am 8/29/06. Circ 165 sx. Rig Released @ 11am 8/29/06

REPORT DATE: 08/31/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

WOC

REPORT DATE: 09/01/2006 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 : CONTINENTAL A STATE #11
DIVISION: NEW MEXICO
EVENT: 50
ELD: EMPIRE
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-34742
PLAN DEPTH :
SPUD DATE : 08/14/2006
DHC : CWC :
AFE TOTAL :
FORMATION: YESO

REPORT DATE: 09/02/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:
WOC

REPORT DATE: 09/03/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:
WOC

REPORT DATE: 09/04/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:
WOC

REPORT DATE: 09/05/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:

RU unit #85 RIH w/4 3/4" tooth bit & drill collars on 2 7/8" J-55 tbg. Drill out DV Tool @ 3445' RIH circ. @ 5388' POH laydown drill collars. RU Schlumberger & run PDC 5300' back to 3400' & perf Blinebry 4840-5088' 2 SPF 74 holes. 09/06/06WOC

REPORT DATE: 09/06/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:

RIH w/5 1/2" PPI tool & PPI perfs w/19 bbls 15% NEFE acid fish valves set Pkr. @ 4784' open bypass & spot acid & balls to Pkr. Close bypass & acidize w/2100 gals 15% NEFE & 200 balls. Balled off 4805# w/150 balls. Avg. Rate 6 bpm Avg. Psi 1600# ISIP 750# 5 min. 594# 10 min. 562# 15 min. 529#. Flow well back 5 min. RU swab IFL @ surf. pull 10 runs 10th run FFL @ 2000' w/10% oil cut. Release Pkr. knock balls off POH get ready to frac

REPORT DATE: 09/07/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:

RU BJ & pump 5 tank hybrid Frac, pump 500 gals technihb ahead 6000 gals 30# linear gel pad start 1/4# 16/30 white sand in 4000 gals pump 8000# lite prop 125 14/30 .15#-.35# in 30,000 gals 30# linear gel. Pump 75,720# 16/30 white sand 1/2#-3# in 45,000 gals 40# linear gel & tail in w/15,460# siber prop 16/30 resin coated sand @ 3# flush w/110 bbls 40# linear gel. Avg. Rate 81 bpm Avg. Psi 1897# ISIP 1130# 5 min. 962# 10 min. 890# 15 min. 856#.

REPORT DATE: 09/08/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC: \$0** **TC: \$0**
CUM : DC: \$0 **CC: \$0** **TC: \$0**

DAILY DETAILS:

Well dead RU Schlumberger & perf Blinebry 4436.5-4733.5 2 SPF 54 holes. RIH w/PTBP & PPI tool Set PTBP @ 4796' & test 3500#. PPI perfs w/16 bbls 15% NEFE acid. Fish valves & set Pkr. @ 4377' open bypass & spot acid & balls to Pkr. Close bypass & acidize w/2100 gals 15% NEFE acid & 162 balls. Balled off 5253# w/130 balls. Avg. Rate 6.2 bpm Avg. Psi 1650# ISIP 827# 5 min. 742# 10 min. 725# 15 min. 709#. RU & swab IFL @ surf. pull 5 runs 5th run pull 800' fluid off SN w/5% oil cut. Release Pkr. RIH knock balls off POH get ready to frac



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #11
DIVISION: NEW MEXICO
EVENT: 50
FIELD: EMPIRE
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-34742
PLAN DEPTH :
SPUD DATE : 08/14/2006
DHC : CWC :
AFE TOTAL :
FORMATION: YESO
REPORT DATE: 09/09/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU BJ for five tank hybrid frac. Begin pumping well loaded with 33bbls. Switch to 16/30 white ottawa. Begin pumping .25# at 82bpm at 2005psi. Switch to liteprop. Begin pumping .15# at 82bpm at 2017psi. Begin pumping .20# at 82bpm at 2021psi. Begin pumping .25# at 82bpm at 2017psi. Begin pumping .30# at 82bpm at 2011psi. Begin pumping .35# at 82bpm at 2004psi. Switch to white ottawa. Begin pumping .5# at 90bpm at 2079psi. Begin pumping 1# at 90bpm at 2050psi. Begin pumping 1.5# at 90bpm at 2001psi. Begin pumping 2# at 90bpm at 1969psi. Begin pumping 2.5# at 90bpm at 1930psi. Begin pumping 3# at 90bpm 1915psi. Begin pumping 3#siberprop at 90bpm at 1930psi. Flush with 99bbls. AR-90bpm AP-1975psi. ISIP-1115psi. 5min-921psi. 10min-860psi. 15min-809psi.

REPORT DATE: 09/10/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

7AM SICP Ops.

REPORT DATE: 09/11/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

ND frac valve. RIH w/ overshot wash 15' of sand off of plug. POH. RIH w/ SN and NC w/ 166jts. Did not tag any fill. Land SN w/ 162jts at 5097'. TAC @ 4213' w/ 134jts. RIH w/ new 2 1/2" x 2" x 24' RHTC trash pump 140- 3/4" rods and 61- 7/8" rods and 1- 2' x 7/8" pony. Hang well on good pump action RD.

REPORT DATE: 09/12/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 09/13/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 09/14/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

1% oil

REPORT DATE: 09/15/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

140 oil

REPORT DATE: 09/16/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

195 oil



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #11
DIVISION: NEW MEXICO
EVENT: 50
ELD: EMPIRE
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-34742
PLAN DEPTH :
SPUD DATE : 08/14/2006
DHC :
CWC :
AFE TOTAL :
FORMATION: YESO
REPORT DATE: 01/15/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
MIRU Rig #93. SDFD.
REPORT DATE: 01/16/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

POH w/ rods and tbg. RU Schlumberger shoot Paddock perms. 3926'-4277'. 36settings. 2SPF. 72holes. 0.41"hole. RD Schlumberger. RIH w/ RBP and PPI. RU BJ for 2500gal PPI/acid job. Spot 18bbls for PPI. PPI all holes 0comm. SDFN.

REPORT DATE: 01/17/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Fish valves. RU BJ to finish acid job. Acid job w/ 30bbls 15% HCL. Start on acid. Dropped 120balls did not ball off. Had problems with BJ pump truck iceing up. Pumped at 4.5bpm at an Avg Pressure of 880#. ISIP-well on a vacuum. Unset PKR. RIH to test RBP. Tested good to 3500#. PU reset pkr RD BJ go to swabbing. Made 10 swab runs. Last run tagged at 3200' pulled 500' with 5% oil cut. POH get ready to frac. RU BJ & pump 5 tank hybrid Frac, pump 500 gals technihib ahead 6000 gals 30# linear gel pad start 1/4# 16/30 white sand in 4000 gals pump 8000# lite prop 125 14/30 .15#-.35# in 30,000 gals 30# linear gel. Pump 75,780# 16/30 white sand 1/2#-3# in 45,000 gals 40# linear gel & tail in w/15,780# siber prop 16/30 resin coated sand @ 3# flush w/90 bbls 40# linear gel. Avg. Rate 81 bpm Avg. Psi 1679# ISIP 1166# 5 min. 792# 10 min. 670# 15 min. 560#.

REPORT DATE: 01/18/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP 400# gas pressure. Bleed well down. RIH wash 40' of sand off of BP. POH. RIH w/ SN and NC w/ 165jts did not tag any fill. PU land SN @ 5097' w/ 162jts. TAC @ 3711' w/ 118jts. RIH w/ new 2 1/2" x 2" x 24' RHTC trash pump. Hang well back on check pump action. RD.

REPORT DATE: 01/19/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
1% oil cut
REPORT DATE: 01/20/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
94 oil 236 gas (total for all Continental A State)
REPORT DATE: 01/21/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
97 oil 216 gas (total for all Continental A State)
REPORT DATE: 01/22/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
171 oil 230 gas (total for all Continental A State)

VII.

COG Operating, LLC
Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
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 #:	6649
Area:	Artesia	Analysis ID #:	191
Lease:	CONTINENTAL A STATE		
Location:	12		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	11/16/2006	Chloride:	108318.0	Sodium:	55385.2
Analysis Date:	11/17/2006	Bicarbonate:	188.5	Magnesium:	2196.0
Analyst:	Mitchell Labs	Carbonate:		Calcium:	10130.4
TDS (mg/l or g/m3):	178033.3	Sulfate:	1800.0	Strontium:	
Density (g/cm3):	1.124			Barium:	
Hydrogen Sulfide:	8			Iron:	14.5
Carbon Dioxide:	40			Manganese:	0.650
Comments:		pH at time of sampling:	6.5		
		pH at time of analysis:			
		pH used in Calculation:	6.5		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	330000
				Resistivity (ohm meter):	.0303

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	0.45	10.91	0.15	281.71	0.16	239.53	0.00	0.00	0.00	0.00		
100	0.53	12.98	0.08	170.80	0.16	241.30	0.00	0.00	0.00	0.00		
120	0.61	15.34	0.03	68.44	0.19	274.05	0.00	0.00	0.00	0.00		
140	0.69	17.70	-0.01	0.00	0.24	328.62	0.00	0.00	0.00	0.00		



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 #:	6998
Area:	Artesia	Analysis ID #:	231
Lease:	CONTINENTAL A STATE		
Location:	12		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	3/6/2007	Chloride:	101912.0	Sodium:	63158.0
Analysis Date:	3/9/2007	Bicarbonate:	415.0	Magnesium:	1035.0
Analyst:	Mitchell Labs	Carbonate:		Calcium:	2316.0
TDS (mg/l or g/m3):	172037.8	Sulfate:	3200.0	Strontium:	
Density (g/cm3):	1.12			Barium:	
				Iron:	1.5
Hydrogen Sulfide:	156			Manganese:	0.300
Carbon Dioxide:	42				
Comments:		pH at time of sampling:	6.4		
		pH at time of analysis:			
		pH used in Calculation:	6.4		
		Temperature @ lab conditions (F):	78	Conductivity (micro-ohms/cm):	207500
				Resistivity (ohm meter):	.0482

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

Values calculated at the given conditions. Units are in % based on 100% dry.											
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	
80		0.14	8.31	-0.16	0.00	-0.15	0.00	0.00	0.00	0.00	0.00
100		0.23	13.94	-0.24	0.00	-0.16	0.00	0.00	0.00	0.00	0.00
120		0.32	19.88	-0.30	0.00	-0.14	0.00	0.00	0.00	0.00	0.00
140		0.41	26.40	-0.35	0.00	-0.10	0.00	0.00	0.00	0.00	0.00



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
FIELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC : CWC : AFE TOTAL :
FORMATION:
REPORT DATE: 09/24/2006 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 #5, Spud 17 1/2" hole at 5:00pm., 9/24/2006.

REPORT DATE: 09/25/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

TD 17 1/2" hole at 325', Ran 8Jts. 13 3/8", 48#, H-40, ST&C, 322', Cement with 448sx Class"C"+2%CaCl2, Plug down at 10:00am, 9/25/2006. Circ. 100sx.

REPORT DATE: 09/26/2006 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 395', Ftg made 70'.

REPORT DATE: 09/27/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Ran 18 Jts 8 5/8 J-55 24# 8rd 805', C/w 400sx 35/65/6 C+ 2%CaCl2, 200sx C+2% CaCl2. Plug down 9:45am 9/27/06. Circ 130sx.

REPORT DATE: 09/28/2006 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 1017', Ftg made 212', MW 8.9, Vis 29, PH 12, 3rd party test BOP to 2,000#.

REPORT DATE: 09/29/2006 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 1970', Ftg made 953', Survey at 1233'-1deg., 1639'-1deg., 1891'-3/4, MW 9.1, Vis 29, PH 11.

REPORT DATE: 09/30/2006 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 2533', Ftg made 563' MW 9.3 Vis 29 pH 11 Survey at 2325' 1 Deg.

REPORT DATE: 10/01/2006 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 3136' Ftg made 603' MW 9.2 Vis 29 pH 11 Survey at 3074' 1 Deg.

REPORT DATE: 10/02/2006 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 3755' Ftg made 619' Survey at 3634' 1 Deg.



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
FIELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC :
CWC :
AFE TOTAL :
FORMATION :
REPORT DATE: 10/03/2006 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 4287' Ftg made 587'

REPORT DATE: 10/04/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

TOH to run cores at 4563'

REPORT DATE: 10/05/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth 4610', Ftg made 47', Cut core from 4574'-4610', MW 9.3, Vis 29, WL 8, PH 10, Core bit wore out, Wrong bit for this area..

REPORT DATE: 10/06/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth 4615', Ftg made 5', TIH with core bit, would not drill, TOH, TIH with 7 7/8 bit, Drill 5' formation and circulate samples. MW 9.3, Vis 29, WL 8, PH 10.

REPORT DATE: 10/07/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth 4675' Ftg made 60' TOH with 7 7/8 bit TIH with core bit. Cut core from 4615-4675

REPORT DATE: 10/08/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

TIH with core barrel, at 4675' Ftg made 18'. Cut core from 4675'-4693'.

REPORT DATE: 10/09/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth Coring at 4717' Ftg made 24'.MW 9.6 vis 29 pH 10.

REPORT DATE: 10/10/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Depth 4752', Ftg made 35', TOH with core, MW 9.2, Vis 29, WL 14, PH 10,

REPORT DATE: 10/11/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Coring at 4771', Ftg made 19', MW 9, Vis 29, WL 13, PH 10, Replaced bolts on crosshead on #1 pump.



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
ELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC :
CWC :
AFE TOTAL :
FORMATION:

REPORT DATE: 10/12/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

TOH at 4811' for core

REPORT DATE: 10/13/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Coring at 4841' Ftg made 30' MW 9.4 vis 32 pH 10

REPORT DATE: 10/14/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Depth 4870', Ftg made 29', Cut final core, Trip in hole with 7 7/8 bit.

REPORT DATE: 10/15/2006 **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 5255', Ftg made 385', Survey at 4970'-1deg., MW 9.2, Vis 29, WL 14, PH 11,

REPORT DATE: 10/16/2006 **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 5460', Ftg made 205', Survey at 5370'-1 1/4deg. TOH for logs, Loggers TD at 5454'

REPORT DATE: 10/17/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

Ran 121Jts. 5 1/2", J-55, 17#, ST&C, 5454', Cement with (first stage) 480sx 50/50/2"C", Plug down, Circ. 200sx., (second stage) 200sx 35/65/6"C", 900sx 50/50/2"C" Plug down at 3:45am, 10/18/2006. Circ. 200sx. Rig Release 7:45 am 10/18/06.

REPORT DATE: 10/19/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

WOC.

REPORT DATE: 10/20/2006 **MD:** **TVD:** **DAYS:** **MW:** **VISC:**
DAILY : DC: \$0 **CC:** \$0 **TC:** \$0
CUM : DC: \$0 **CC:** \$0 **TC:** \$0

DAILY DETAILS:

WOC.

REPORT DATE: 10/21/2006 **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 : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
ELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC :
CWC :
AFE TOTAL :
FORMATION:
REPORT DATE: 10/22/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:
WOC
REPORT DATE: 10/23/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU unit #80 RIH w/4 3/4" tooth bit & drill out DV Tool @ 3440' RIH circ. @ PBD 5436' & POH. RU Schlumberger & run PDC 5436' back to 3400'. Perf Blinbry 5000.5-5292.5' 2 SPF 66 holes. Start in hole w/PPI tool.

REPORT DATE: 10/24/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RIH w/PPI tool and PPI/acidize with 2500 gals 15% and 198 ball sealers. Every perf open, had 2100 gals left for ball job. Balled out to 5000 psi w/117 balls. Avg psi-2476, avg rate-6.3 BPM, ISIP-1692, 5 min.-1018, 10 min.-969, 15 min.-942. Swabbed dry in 12 runs, last run had 200' w/stain. Wait 1 hr pulled 1000' fluid w/1-2% oil.

REPORT DATE: 10/25/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Tag fluid @ 1700' w/stain of oil. Swab dry 5 runs 200' w/1-2% oil cut. Get ready to frac. RU BJ & frac 5 tank hybrid pump 500 gals technihb ahead 6000 gals 30# linear gel pad start 1/4# 16/30 white sand in 4000 gals pump 8026# lite prop 125 14/30 .15#-.35# in 30,000 gals 30# linear gel pump 77,000# 16/30 white sand 1/2#-3# in 45,000 gals 40# linear gel & tail in w/ 15,040# siber prop 16/30 resin coated @ 3# flush w/114 bbls. Avg. Rate 81.5 bpm Avg. Psi 2900# ISIP 1762# 5 min. 1592# 10 min. 1551# 15 min. 1493#

REPORT DATE: 10/26/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP 850# flow well back RU Schlumberger & perf Blinbry 4620'-4908' 2 SPF 64 holes. RIH w/5 1/2 PPI & PTBP set PTBP @ 4955' & test 3500#. PPI perfs w/18 bbls 15% NEFE acid. Fish valves & set Pkr. @ 4554' open bypass & spot acid & balls to Pkr. Close bypass acidize w/ 2200 gals 15% NEFE acid & 192 balls Didn't ball off Avg. Rate 6.3 bpm Avg. Psi 1200# ISIP 720# 5 min. 640# 10 min. 597# 15 min. 569#. Well flowed back 30min. Pull 1 swab run flowing acid leave open to pit.

REPORT DATE: 10/27/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Tag fluid @ 100' no oil or gas. Pull 1 run well flowed for 20 min. 3rd run tag @ 900' hitting frac balls. Pull 1100' 4th run hit frac balls @ 700' make ball catcher run got 17 balls .Release Pkr. RIH knock balls off POH RU BJ & frac w/5 tank hybrid. Pump 500 gals technihb ahead 6000 gals pad start 1/4# 16/30 white sand in 4000 gals pump 8022# lite prop 125 14/30 .15#-.35# in 30,000 gals 30# linear gel pump 75,540# 16/30 white sand 1/2#-3# in 45,000 gals 40# linear gel & tail in w/15,360# siber prop 16/30 resin coated sand @ 3#. Flush w/ 105 bbls. Avg. Rate 82.5 bpm Avg. Psi 3215# ISIP 1705# 5 min. 1380# 10 min. 1294# 15 min. 1252#



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
ELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC :
CWC :
AFE TOTAL :
FORMATION :
REPORT DATE: 10/28/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP 500# flow well back RIH wash 15' sand POH w/PTBP. RU Schlumberger & perf. Blinbry 4300.5-4527' 2 SPF 56 holes RIH w/5 1/2" PPI & PTBP set@ 4597' & test 3500# PPI perfs w/16 bbls 15% NEFE acid fish valves Set Pkr. @ 4597' open bypass spot acid close bypass & acidize w/2000gals 15% NEFE acid & 168 balls. Balled off 5400# w/96 balls. Avg. Rate 6 bpm Avg. Psi 2300# ISIP 1475# 5 min. 1351# 10 min. 1302# 15 min. 1263#. Flow well back pull 2 runs. SDFN

REPORT DATE: 10/30/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Tag fluid @ 800' had 200' free oil on top get ready to frac. RU BJ for five tank hybrid frac. Begin pumping well loaded w/ 23bbls. Switch to 16/30 white ottawa sand. Begin pumping .25# at 81bpm at 2418psi. Switch to liteprop. Begin pumping .15# at 81bpm at 2418psi. Begin pumping .20# at 81bpm at 2423psi. Begin pumping .25# at 81bpm at 2429psi. Begin pumping .30# at 81bpm at 2427psi. Begin pumping .35# at 81bpm at 2451psi. Switch to white sand. Begin pumping .5# at 81bpm at 2434psi. Begin pumping 1# at 81bpm at 2376psi. Begin pumping 1.5# at 81bpm at 2331psi. Begin pumping 2# at 81bpm at 2297psi. Begin pumping 2.5# at 81bpm at 2271psi. Begin pumping 3# at 81bpm at 2246psi. Begin pumping 3#siberprop at 81bpm at 2280psi. Flush w/ 99bbls. AR-81bpm AP-2270psi. ISIP-1370psi. 5min-1206psi. 10min-1143psi. 15min-1106psi. Sand totals 16/30-75,640# siber-15,180# liteprop-8,031#

REPORT DATE: 10/31/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

SICP 100# flow well back RIH wash sand 45' POH RIH wash 200' on bottom land SN @ 5310' w/169 jts. TA @ 5310' w/131 jts TA WOULD" T SET. RIH w/2 1/2x2x24' trash pump 74 new T-66 7/8" & 135 new T-66 3/4" rods 2'x3/4" & 2'-8'x7/8" ponies. Hang well on w/Lufkin 640-144" stroke jack.

REPORT DATE: 11/01/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 11/02/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 11/03/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water

REPORT DATE: 11/04/2006 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

water gas on csg



WELL CHRONOLOGY REPORT

WELL NAME : CONTINENTAL A STATE #12
DIVISION: NEW MEXICO
EVENT: 50
FIELD :
LOCATION :
COUNTY & STATE : EDDY
NM
CONTRACTOR :
WI % : AFE # :
API # : 30-015-35052
PLAN DEPTH :
SPUD DATE : 09/24/2006
DHC :
CWC :
AFE TOTAL :
FORMATION :
REPORT DATE: 02/12/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

Pump would not unseat. Back rods off. POH w/ rods. NU BOP. POH w/ tbg. RU Schlumberger shoot Paddock perms. 3811'-4044'. 36settings. 1SPF. 36holes. 0.41"hole. RD Schlumberger. PU PPI and RBP start in hole. Leave hanging above perms. SDFD.

REPORT DATE: 02/13/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

PPI/acid job w/ 2500gals. PPI all holes open. Acid job w/ 40bbls. Did not ball off. Max pressure 1850#. AR-6bpm. AP-1600#. ISIP-1020#. 14min-vacuum. Go to swabbing. Swabbed well last run had 5-8% oil cut and good gas POH get ready to frac. Ready to frac

REPORT DATE: 02/14/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

RU BJ for 5 tank hybrid frac. Pump 500 gals technihib ahead 6000 gals 30# linear gel pad start 1/4# 16/30 white sand in 4032 gals pump 8013# lite prop 125 14/30 .15#-.35# in 30,000 gals 20# linear gel pump 75,040# 16/30 white sand 1/2#-3# in 45,000 gals 30# linear gel & tail in w/15,300# siber prop 16/30 resin coated @ 3# flush w/86 bbls. Avg. Rate 81 bpm Avg. Psi 2334# ISIP 1536# 5 min. 1185# 10 min. 11046# 15 min. 1007#.

REPORT DATE: 02/15/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

7AM SICP well on a vacuum. RIH w/ overshot wash 30' of sand off of BP. POH. RIH w/ SN and NC w/ 172jts 2 7/8" 8rd tbg. Did not tag fill. PU land SN @ 5310' w/ 169jts. TAC @ 3624' w/ 115jts. RIH w/ new 2 1/2x2x24' trash pump. Rods started stacking out. POH w/ pump. RU hot oiler flush tbg SDFD..

REPORT DATE: 02/16/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

PU pump RIH w/ new 2 1/2x2x24' trash pump 74 new T-66 7/8" & 135 new T-66 3/4" rods 2'x3/4" & 2'-8'x7/8" ponies. Hang well on w/lufkin 640-144" stroke jack.

REPORT DATE: 02/17/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

35% oil cut

REPORT DATE: 02/18/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

106 oil 168 gas (total for all Continental A (sweet))

REPORT DATE: 02/19/2007 MD: TVD: DAYS: MW: VISC:
DAILY : DC: \$0 CC: \$0 TC: \$0
CUM : DC: \$0 CC: \$0 TC: \$0
DAILY DETAILS:

90 oil 150 gas (total for all Continental A (sweet))

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'

Texaco BE #8 (Loco Hills Field)

- Paddock 4,367'-4,681'
- Blinebry 4,922'-5,721'

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
20 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.

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 ☐	7. Lease Name or Unit Agreement Name Continental A State
2. Name of Operator COG Operating LLC	8. Well Number 11
3. Address of Operator 550 W. Texas Ave., Suite 1300 Midland, TX 79701	9. OGRID Number 229137
Well Location Unit Letter <u>F</u> : <u>1450'</u> feet from the <u>North</u> line and <u>1907'</u> feet from the <u>West</u> line Section <u>30</u> Township <u>17S</u> Range <u>29E</u> NMPM County <u>Eddy</u>	10. Pool name or Wildcat 96210 Empire; Glorieta Yeso
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3648 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 ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Convert in injection ☒

SUBSEQUENT REPORT OF:

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

☐ 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 12/10/09

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): _____

Continental A St #11

API # 30-015-34742

Sec 30, T17S, R29E, Unit F

1450' FNL & 1907' FWL

Eddy County, NM

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 POH w rods & tbg.
2. PU & RIH w/ 4-3/4" bit & 5-1/2" csg scraper on 2-7/8" WS, CO to PBTD @ 5718', Circ clean. POOH & LD bit.
3. RIH w/ WS & 5-1/2" treating pkr, & RBP assembly. Set RBP @ +/- 5100', set pkr @ +/- 4810'.
4. RU acid company.
5. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
6. Rls pkr & wash down to RBP. Catch RBP and reset @ +/- 4770'. Set pkr @ +/- 4400'.
7. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
8. Rls pkr & wash down to RBP. Catch RBP and reset @ +/- 4310'. Set pkr @ +/- 3890'.
9. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
10. RD & Rls acid company.
11. Rls pkr & catch RBP, POOH w/ RBP, 5-1/2" pkr, and WS.
12. RIH w/ 2-7/8" inj tbg & inj pkr with down hole regulators. Set pkrs @ 4336' & 3830'.
13. Rls on/off tool, Circ annulus w/ pkr fluid, latch onto on/off tool.
14. Test csg to 500psi.
15. Begin Injection as permitted on the C108.

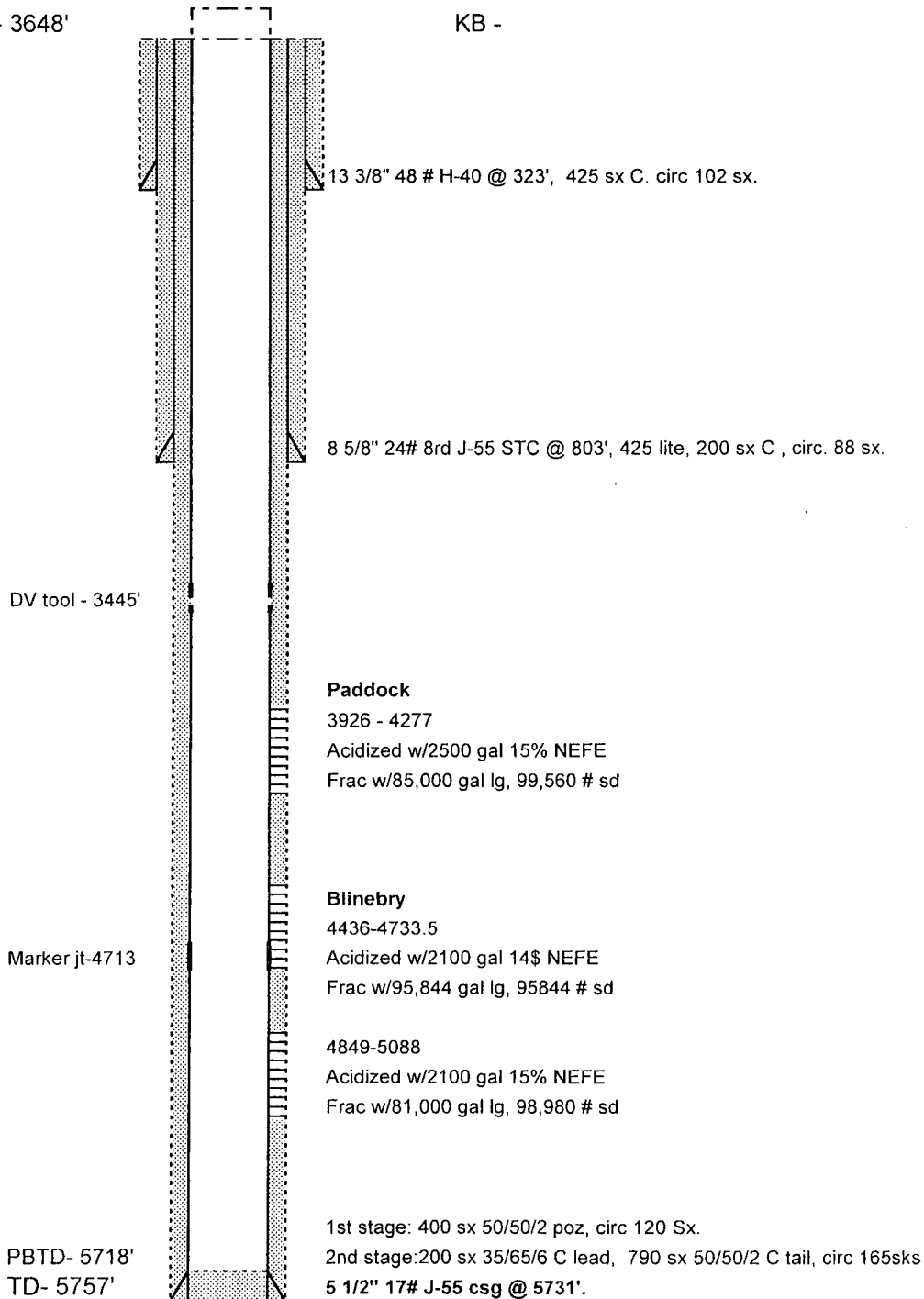
Tyler Deans
COG Operating LLC
432-553-4699

COG Operating LLC

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Eddy County, NM

Elevation - 3648'

KB -



12/29/2009

Continental A State #11 Wellbore diagram

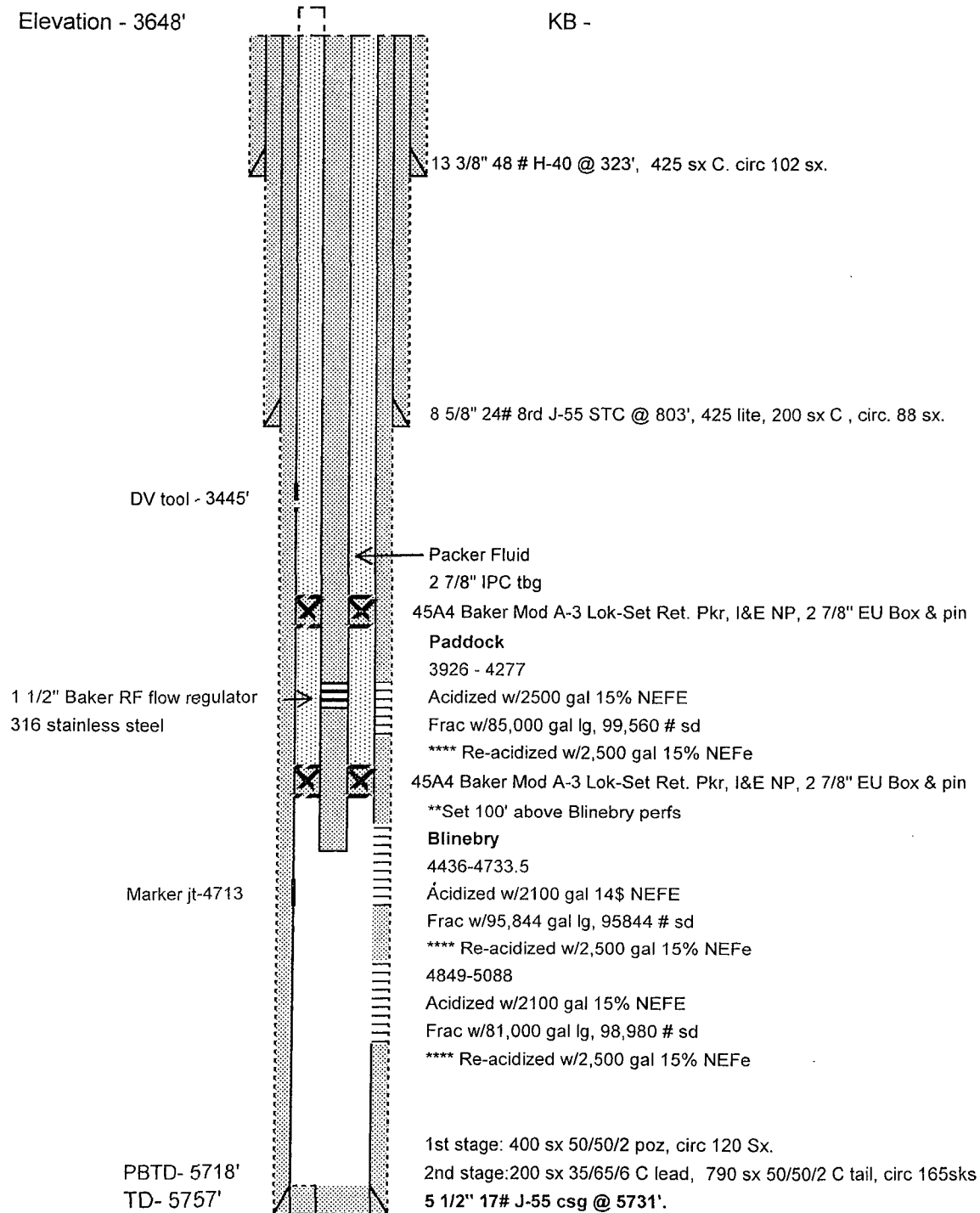
SHodges

COG Operating LLC

Continental A State #11
 API# 30-015-34742
 Sec 30, T17S, R29E, Unit F
 1450' FNL & 1907' FWL
 Eddy County, NM

Elevation - 3648'

KB -



5-1/2" RETRIEVAL INJECTION SYSTEM

CUSTOMER: COG OPERATING, LLC

COUNTRY: USA FIELD: NA

QUOTATION NO. JH10010003, COMBELL NO. GC FED VARIOUS

DRAWING NO. S.S_RF_Regulators_COG_GC Federal Project.dwg

APPROVED BY: ERIC MCCLUSKY

DRAWN BY: JAY HARDESTY

DATE: 01-07-09



Baker Oil Tools

Normal Rotation
© 2010 Baker Hughes Incorporated. All rights reserved.

MAX. O.D.	MIN. I.D.	WELL SCHEMATIC	DESCRIPTION	LENGTH	DEPTH
			1 TUBING HANGER SIZE: THREADS: MATERIAL: PRODUCT FAMILYH		
3.668"	2.441"		2 INTERNALLY PLASTIC COATED INJECTION TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH		
4.736"	2.000"		3 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 FAMILYH00226/		
3.668"	2.441"		4 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
4.750"	1.995"		5 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & 2 ENP, 316 SS RH LATCH 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"		6 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00006/		
4.641"	1.968"		7 MODEL A-3 LOCK-SET RETRIEVABLE CASING PACKER SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: F-110 PRODUCT FAMILYH64636/		
3.668"	2.441"		8 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
4.750"	1.995"		9 2-3/8" BGLO-1.5 OVAL SIDE POCKET MANDREL FOR 1-1/2" "RF" FLOW REGULATOR, 1 & 2 ENP, 316 SS RH LATCH AND RF REGULATOR SIZE: 2-3/8" THREADS: 2-3/8" 4.7 LBS/FT EU BOX X PIN MATERIAL: J-55 PRODUCT FAMILYH		
			10 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
			11 MODEL A-3 LOCK-SET RETRIEVABLE CASING PACKER SIZE: 45A4 THREADS: 2-7/8" 6.5 LBS/FT EU BOX X PIN MATERIAL: F-110 PRODUCT FAMILYH64636/		
			12 TUBING SIZE: 2-7/8" 6.5 LBS/FT THREADS: 2-7/8" 6.5 LBS/FT EUE MATERIAL: J-55 PRODUCT FAMILYH00005/		
			13 BULL PLUG SIZE: 2-7/8" THREADS: MATERIAL: PRODUCT FAMILYH69350/		

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
20 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. 30-015-35052
Indicate Type of Lease STATE ☒ FEE ☐
State Oil & Gas Lease No.

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 ☐

7. Lease Name or Unit Agreement Name Continental A State

2. Name of Operator
COG Operating LLC

8. Well Number 12

3. Address of Operator
550 W. Texas Ave., Suite 1300 Midland, TX 79701

9. OGRID Number 229137

10. Pool name or Wildcat 96210 Empire; Glorieta Yeso

Well Location Unit Letter D : 330' feet from the North line and 583' feet from the West line Section 30 Township 17S Range 29E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3660' 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 ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ OTHER: Convert in injection ☒	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ 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 NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE K. Carrillo TITLE Regulatory Analyst DATE 12/10/09

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): _____

Continental A St #12

API # 30-015-35052

Sec 30, T17S, R29E, Unit D

330' FNL & 583' FWL

Eddy County, NM

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

1. MIRU POH w rods & tbg.
2. PU & RIH w/ 4-3/4" bit & 5-1/2" csg scraper on 2-7/8" WS, CO to PBTD @ 5436', Circ clean. POOH & LD bit.
3. RIH w/ WS & 5-1/2" treating pkr, & RBP assembly. Set RBP @ +/- 5310', set pkr @ +/- 4965'.
4. RU acid company.
5. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
6. Rls pkr & wash down to RBP. Catch RBP and reset @ +/- 4950'. Set pkr @ +/- 4590'.
7. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
8. Rls pkr & wash down to RBP. Catch RBP and reset @ +/- 4565'. Set pkr @ +/- 4250'.
9. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
10. Rls pkr & wash down to RBP. Catch RBP and reset @ +/- 4100'. Set pkr @ +/- 3761'.
11. Pump 2500 gals 15% HCl while dropping 40 bioballs as a diverter. Displace w/ 50bbls FW. Monitor backside as job is being pumped.
12. RD & Rls acid company.
13. Rls pkr & catch RBP, POOH w/ RBP, 5-1/2" pkr, and WS.
14. RIH w/ 2-7/8" inj tbg & inj pkrs with down hole regulators. Set pkrs @ 4200' & 3711'.
15. Rls on/off tool, Circ annulus w/ pkr fluid, latch onto on/off tool. Test csg to 500psi.
16. Begin Injection as permitted on the C108.

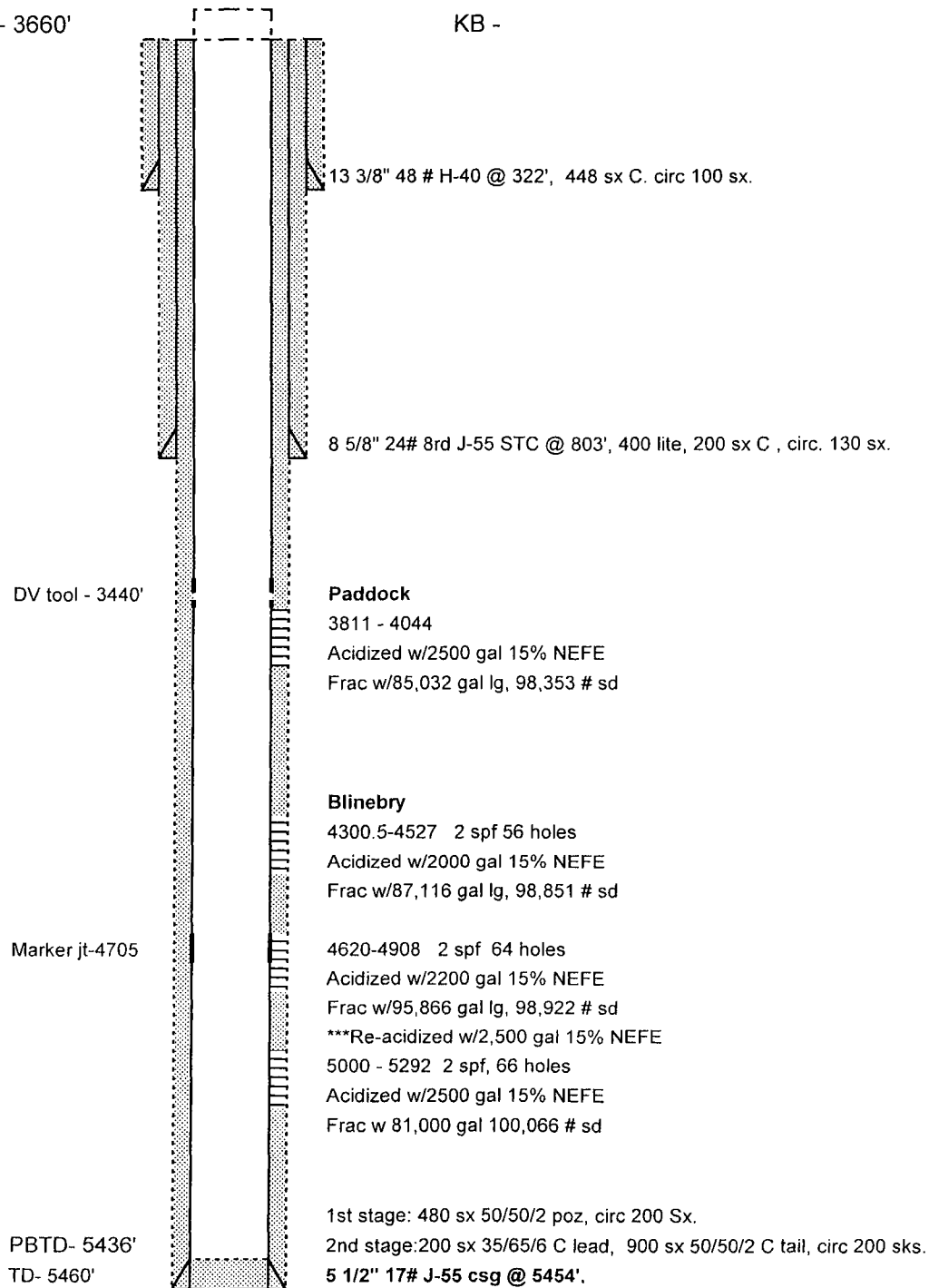
Tyler Deans
COG Operating LLC
432-553-4699

COG Operating LLC

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL, 583' FWL
Eddy County, NM

Elevation - 3660'

KB -

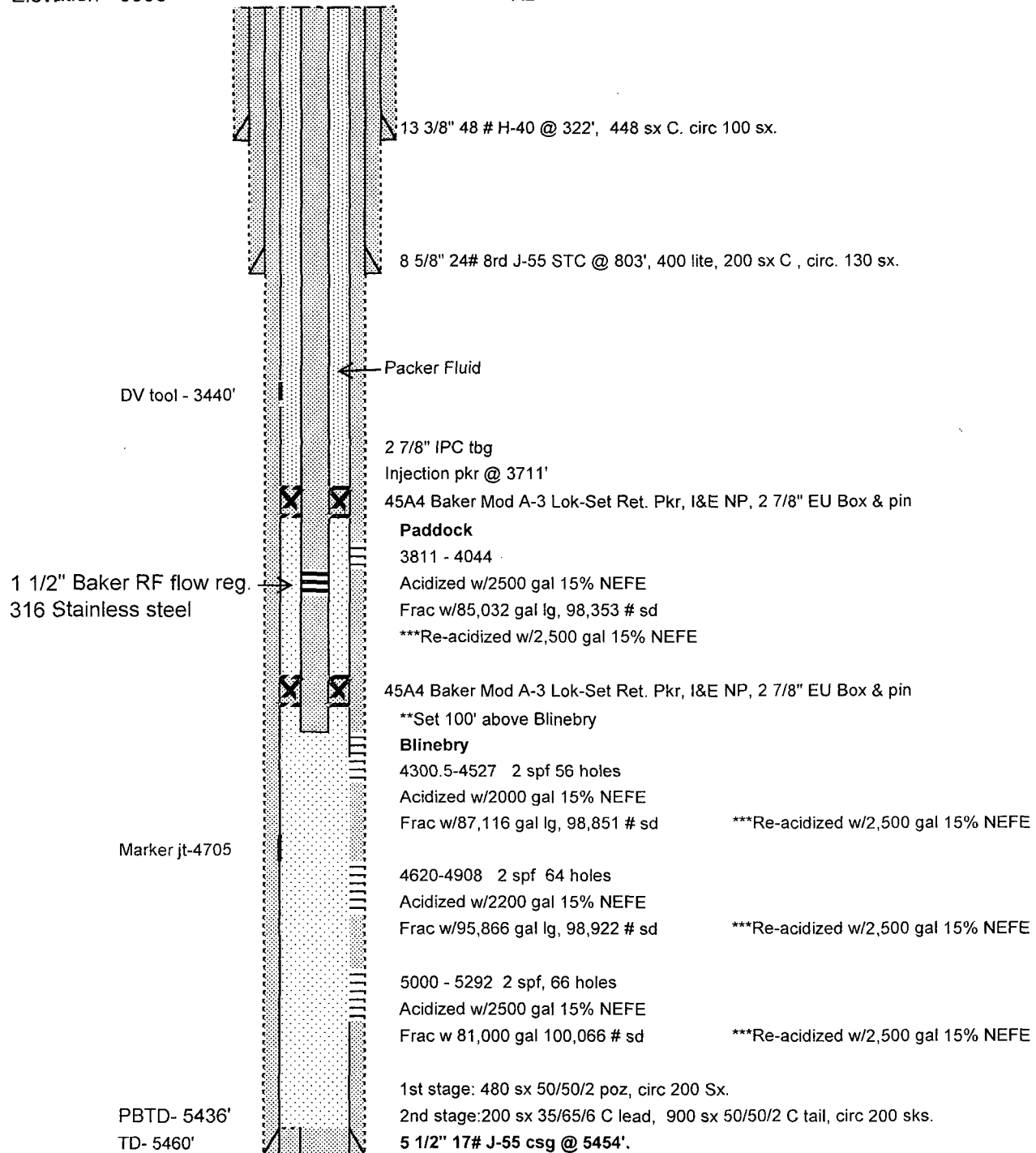


COG Operating LLC

Continental A State #12
 API# 30-015-35052
 Sec 30, T17S, R29E, Unit D
 330' FNL, 583' FWL
 Eddy County, NM

Elevation - 3660'

KB -



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
Continental A State 11							
12/19/2009	12/20/2009	24	21.00	89	7.00	No	
12/20/2009	12/21/2009	24	22.00	84	8.00	No	

Logs are on file with the New Mexico OCD.

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
Continental A State 12							
12/21/2009	12/22/2009	24	25.00	77	18.00	No	
12/23/2009	12/24/2009	24	22.00	71	20.00	No	

Logs are on file with the New Mexico OCD.

XI.

COG Operating, LLC
Continental A State 11 & 12
Sec 20, T17S, R29E
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.



December 31, 2009

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

Certified Mail Article Number: 7009 2250 0001 0942 3523

Re: Application for injection well on the:

Mesquite State #15
API# 30-015-344496
Sec 20, 17S, R29E, Unit L
1750' FSL & 990' FWL
Empire; Yeso, East Field
Eddy County, New Mexico

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
Empire; Yeso Field
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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Detailed Results:

- Delivered, January 04, 2010, 9:15 am, HOUSTON, TX 77099
- Arrival at Unit, January 04, 2010, 6:37 am, HOUSTON, TX 77072
- Acceptance, December 31, 2009, 1:55 pm, MIDLAND, TX 79705

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 12.72

Stamp: MIDLAND TX 31 JAN 4 2010

Sent To
Chevron USA Production Company
Street, Apt. No., or PO Box No. 11111 S Wilcrest
City, State, ZIP+4 Houston, TX 77099

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
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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 3523

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

[Signature]

C. Date of Delivery

02-4

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

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☒ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



December 31, 2009

Fasken Oil & Ranch
303 West Wall Avenue
Suite 1800
Midland, TX 79701

Certified Mail Article Number: 7009 2250 0001 0942 3516

Re: Application for injection well on the:

Mesquite State #15
API# 30-015-344496
Sec 20, T17S, R29E, Unit L
1750' FSL & 990' FWL
Empire; Yeso, East Field
Eddy County, New Mexico

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
Empire; Yeso Field
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 Blinebry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinebry 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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Detailed Results:

- Delivered, January 04, 2010, 10:08 am, MIDLAND, TX 79701
- Acceptance, December 31, 2009, 1:50 pm, MIDLAND, TX 79705

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 9.90
Sent To	Fasken Oil & Ranch
Street, Apt. No., or PO Box No.	303 West Wall Avenue
City, State, ZIP+4	Suite 1800 Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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1. Article Addressed to:

Fasken Oil & Ranch
303 West Wall Avenue
Suite 1800
Midland, TX 79701

2. Article Number
(Transfer from service label)

7009 2250 0001 0942 3516

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Carol Holley

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Carol Holley

C. Date of Delivery

1-4-10

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.

4. Restricted Delivery? (Extra Fee)

☐ Yes



December 31, 2009

Lobos Energy Partners, LLC
309 S Halagueno Street
Carlsbad, NM 88220

Certified Mail Article Number: 7008 1830 0000 8170 1958

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
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 Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 10.09
Sent To	
Lobos Energy Partners, LLC	
Street, Apt. No., or PO Box No.	
309 S Halagueno Street	
City, State, ZIP+4	
Carlsbad, NM 88220	
PS Form 3800, August 2006	
See Reverse for Instructions	

7008 1830 0000 8170 1958

MIDLAND TX CLAYDESTA STA 79705
Postmark
DEC 31 2009
10 30


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Your item was delivered at 10:43 AM on January 6, 2010 in CARLSBAD, NM 88220.

Detailed Results:

- **Delivered, January 06, 2010, 10:43 am, CARLSBAD, NM 88220**
- **Acceptance, December 31, 2009, 1:53 pm, MIDLAND, TX 79705**

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 10.09
7008 1830 0000 8170 1958 MIDLAND TX CLAYDESTA STA 79705 DEC 31 2009 USPS	
Sent To Lobos Energy Partners, LLC Street, Apt. No., or PO Box No. 309 S Halagueno Street City, State, ZIP+4 Carlsbad, NM 88220	
PS Form 3800, August 2006 See Reverse for Instructions	

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1. Article Addressed to:

Lobos Energy Partners, LLC
309 S Halagueno Street
Carlsbad, NM 88220

2. Article Number
(Transfer from service label)

7008 1830 0000 8170 1958

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x D. R. Kilgore

☒ Agent☐ Addressee

B. Received by (Printed Name)

D. R. Kilgore

C. Date of Delivery

4/6/10

D. Is delivery address different from item?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

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

4. Restricted Delivery? (Extra Fee)

☐ Yes



December 31, 2009

Marbob Energy Corporation
2208 West Main Street
Artesia, NM 88211

Certified Mail Article Number: 7008 1830 0000 8170 1989

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
Eddy County, New Mexico

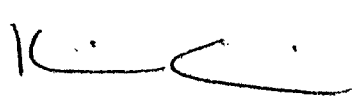
To Whom It May Concern:

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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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 10.09

7008 1830 0000 8170 1989

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DEC 21 2009
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USPS

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Sent To	
Marbob Energy Corporation	
Street, Apt. No., or PO Box No. 2208 West Main Street	
City, State, Zip+4 Artesia, NM 88211	


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Your item was delivered at 9:39 AM on January 6, 2010 in ARTESIA, NM 88210.

Detailed Results:

- Delivered, January 06, 2010, 9:39 am, ARTESIA, NM 88210
- Notice Left, January 04, 2010, 4:43 pm, ARTESIA, NM 88210
- Acceptance, December 31, 2009, 1:52 pm, MIDLAND, TX 79705

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For delivery information, visit our website at www.usps.com	
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Postage	\$ 4.99
Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 10.09
CLAYTON STA 79705 Postmark Here DEC 21 2009 MIDLAND TX USPS 10.30	
Sent To	
Marbob Energy Corporation	
Street, Apt. No., or PO Box No. 2208 West Main Street	
City, State, ZIP+4 Artesia, NM 88211	
PS Form 3800, August 2006	
See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Marbob Energy Corporation
2208 West Main Street
Artesia, NM 88211

2. Article Number:
(Transfer from service label)

7008 1830 0000 8170 1989

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- ☐ Agent
- ☐ Addressee

B. Received by (Printed Name)

Marissa

C. Date of Delivery

1-6-10

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.

4. Restricted Delivery? (Extra Fee)

☐ Yes



February 02, 2010

Nadel and Gussman Heyco, LLC
500 North Main Street
Suite 1
Roswell, NM 88201

Certified Mail Article Number: 7009 2250 0001 0942 3998

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
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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Search Results

Label/Receipt Number: 7009 2250 0001 0942 3998

Class: Priority Mail®

Service(s): Certified Mail™
Return Receipt

Status: Delivered

Track & Confirm

Enter Label/Receipt Number.

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Your item was delivered at 9:55 AM on February 3, 2010 in ROSWELL, NM 88201.

Detailed Results:

- Delivered, February 03, 2010, 9:55 am, ROSWELL, NM 88201
- Acceptance, February 02, 2010, 2:58 pm, ODESSA, TX 79761

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ROSWELL NM 88201

Postage	\$ 5.86	
Certified Fee	2.80	
Return Receipt Fee (Endorsement Required)	2.30	
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 10.96	

Sent To: Nadel and Gussman Heyco, LLC
 Street, Apt. No., or PO Box No.: 500 North Main Street
 City, State, ZIP+4: Suite 1 Roswell, NM 88201

PS Form 3800, August 2005 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
1. Article Addressed to: Nadel and Gussman Heyco, LLC 500 North Main Street Suite 1 Roswell, NM 88201		A. Signature ☐ Agent ☒ Addressee B. Received by (Printed Name) ☐ Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below:	
2. Article Number (Transfer from service label) 7009 2250 0001 0942 3598		3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540		4. Restricted Delivery? (Extra Fee) ☐ Yes	



February 02, 2010

BP America Production Company
600 N Marienfeld
Suite 800
Midland, TX 79702

Certified Mail Article Number: 7009 2250 0001 0942 3981

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
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 Blinebry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinebry 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

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits.		A. Signature X <u>Marta G. Carrasco</u> ☐ Agent ☐ Addressee	
1. Article Addressed to: BP America Production Company 600 N Marienfeld Suite 600 Midland, TX 79702		B. Received by (Printed Name) <u>Marta G. Carrasco</u> C. Date of Delivery <u>2-4-10</u>	
2. Article Number (Transfer from service label) <u>7009 2250 0001 0942 3981</u>		D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No	
		3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.	
		4. Restricted Delivery? (Extra Fee) ☐ Yes	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540			

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only. No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ <u>5.58</u>
Certified Fee	<u>2.30</u>
Return Receipt Fee (Endorsement Required)	<u>2.30</u>
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ <u>10.18</u>
0496 0955 TX 79701-9938 Postmark FEB 2 2010 02/02/2010 PS	
Sent To BP America Production Company Street, Apt. No., or PO Box No. 600 N Marienfeld City, State, ZIP+4 Suite 600 Midland, TX 79702	
PS Form 3800, August 2008 See Reverse for Instructions	



February 02, 2010

Lime Rock Resources
1111 Bagby Street
Houston, TX 77002

Certified Mail Article Number: 7009 2250 0001 0942 3974

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
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 Blinebry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinebry 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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Label/Receipt Number: 7009 2250 0001 0942 3974

Class: Priority Mail®

Service(s): Certified Mail™

Return Receipt

Status: Delivered

Track & Confirm

Enter Label/Receipt Number.

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Your item was delivered at 2:59 PM on February 4, 2010 in HOUSTON, TX 77002.

Detailed Results:

- Delivered, February 04, 2010, 2:59 pm, HOUSTON, TX 77002
- Arrival at Unit, February 04, 2010, 12:30 pm, HOUSTON, TX 77002
- Acceptance, February 02, 2010, 2:59 pm, ODESSA, TX 79761

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HOUSTON TX 77002

OFFICIAL USE

Postage	\$ 6.77
Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 11.92

Postmark Here
 FEB - 2 2010
 02/02/2010

Sent To: Lime Rock Resources
 Street, Apt. No., or PO Box No.: 1111 Bagby Street
 City, State, ZIP+4: Houston, TX 77002

PS Form 3800, August 2008 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. - Print your name and address on the reverse so that we can return the card to you. - Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) <i>Donna Kimball</i> C. Date of Delivery <i>2/4/10</i> D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
1. Article Addressed to: Lime Rock Resources 1111 Bagby Street Houston, TX 77002	3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.
2. Article Number (Transfer from service label)	4. Restricted Delivery? (Extra Fee) ☐ Yes
7009 2250 0001 0942 3974	



February 02, 2010

Mewbourne Oil Company
500 W Texas Ave
Suite 1020
Midland, TX 79701

Certified Mail Article Number: 7009 2250 0001 0942 3967

Re: Application for injection well on the:

Continental A State #11
API# 30-015-34742
Sec 30, T17S, R29E, Unit F
1450' FNL & 1907' FWL
Empire; Yeso Field
Eddy County, New Mexico

Continental A State #12
API# 30-015-35052
Sec 30, T17S, R29E, Unit D
330' FNL & 583' FWL
Empire; Yeso Field
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 Blinebry which is consolidated within the Yeso pool. Paddock Perfs are 3873.5 – 4114.5, Blinebry 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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Label/Receipt Number: 7009 2250 0001 0942 3967

Class: Priority Mail®

Service(s): Certified Mail™
Return Receipt

Status: Acceptance

Your item was accepted at 2:57 PM on February 2, 2010 in ODESSA, TX 79761. Information, if available, is updated periodically throughout the day. Please check again later.

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Enter Label/Receipt Number.

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SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits.		A. Signature ☒ <i>Paul Haden</i> ☐ Agent ☐ Addressee	
1. Article Addressed to: Mewbourne Oil Company 500 West Texas Avenue Suite 1020 Midland, TX 79701		B. Received by (Printed Name) PAUL HADEN	C. Date of Delivery 2-3-10
2. Article Number (Transfer from service label) 7009 2250 0001 0942 3967		D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No	
		3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.	
		4. Restricted Delivery? (Extra Fee) ☐ Yes	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540			

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For delivery information visit our website at www.usps.com	
MIDLAND TX 79701	
OFFICIAL USE	
Postage	\$ 5.0580
Certified Fee	2.8000
Return Receipt Fee (Endorsement Required)	2.3000
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 10.1480
0496 MIDLAND TX 79701 Postmark Here FEB - 2 2010 02/02/2010	
Sent To Mewbourne Oil Company Street, Apt. No., or PO Box No. 500 West Texas Avenue Suite 1020 City, State, ZIP+4 Midland, TX 79701	
PS Form 3800, August 2006 See Reverse for Instructions	

Affidavit of Publication

NO.

20962

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.

Published in the Artesia Daily Press, Artesia, NM December 24, 2009 Legal 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