

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.
30-005-21136

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. 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

2. Name of Operator
APACHE CORPORATION

3. Address of Operator
2000 POST OAK BLVD., SUITE 100, HOUSTON, TEXAS 77056-4400

4. Well Location
Unit Letter P : 330 Feet From The SOUTH Line and 330 Feet From The EAST Line

Section 28 Township 8s Range 32e NMPM CHAVES County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

4,356' GR

11. 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 ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☒ 13 3/8" CASING & CEMENT

OTHER: ☐

12. 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.

CEMENT COMPANY BJ/WESTERN

PLACEMENT METHOD PUMPDOWN PLUG

TEST METHOD- RIG MUD PUMPS FOR 30 MINUTES AT 1,000 psi, with MUD. MW 8.9ppg, VIS 32, TEST OK.
TOP OF CEMENT- CEMENT CIRCULATED TO SURFACE.

RULE 107 OPTION TWO "B"

CEMENT - 556 CU.FT., 415sks of "C" with 2.0% CAC12 + 0.25 lb/sk CELLO-SEAL + 56.0% H2O.

CEMENT YIELD 1.34 CU.FT./SK, SLURRY WEIGHT = 14.81 lb/gal. SLURRY TEMPERATURE 80 DEGS. FARH.

FORMATION TEMPERATURE AT 430' = 64.0 DEGS. FARH.

TIME CEMENT IN PLACE, 4PM ON 04-19-95, DRILLED OUT AT 7AM ON 04-20-95.

WAITED ON CEMENT UNDER PRESSURE OF FLOAT VALUES FOR 15 HOURS PRIOR TO 30 MINUTE 1,000 psi TES

COMPRESSION STRENGTHS 12 HOUR 1,700

24 HOUR 2,600

72 HOUR 3,700

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Douglas H. Adams
DOUGLAS H. ADAMS

TITLE DRILLING ENGINEERING TECH. DATE 04-24-95
(713) 296-6528
TELEPHONE NO.

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

MAY 01 1995

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



CASING AND CEMENTING REPORT

District NEW MEXICO Lease STATE "28" Well No. 1 Date 4-18-95
Datum RKB Last casing: Size 20" set at 40' This casing: Size 13 7/8" to be set at 490
Driller's total depth 430 Electric log to _____ Hole size 17 1/2" in., with _____ in. rat hole below _____
Casing at well: No. of joints 11 Amount, measured overall 479.90 Amount, less threads 476.05

LOG OF CASING STRING, EACH ITEM BEING LISTED IN SAME ORDER AS RUN INTO WELL

Pieces	Size — Item — Make — Description	Wt. / Ft.	Grade	Threads	Cond'n.	Made-up Length
1	DAVIS-LYNCH 13 7/8" GUIDE SHOE				NEW	1.15
1	JOINT 13 7/8" CASING	48"	H-40	ST&C	NEW	46.92
1	DAVIS-LYNCH 13 7/8" FLOAT COLLAR				NEW	1.65
9	JOINTS 13 7/8" CASING	48"	H-40	ST&C	NEW.	382.38

Time required to run 1 3/4 hrs. Top of casing string 2' ft. above (below) datum. Total 432.10
Casing left out of string: No. of full joints 1 Amount, measured overall 47.10 Amount, less threads 46.75
Centralizers: No. 4 Make DAVIS-LYNCH BOW Depths placed 415' — 334' — 205' — 77'

CEMENTING REPORT — Service Co. used WESTERN / B.J. No. of pump trucks 1 Blender? _____

Good circulation established? YES Minutes circulated 15 Was casing bottomed up? YES

Bottom plug used? NO CEMENT MIXED: Total Sacks 415 Total slurry volume (cu. ft.) 556.1

(see reverse side) Minutes required: To mix 20 To start top plug 2 To pump plug down 11

Pumped plug to 380 PRESSURES: Late pumping 200 Final 450 Bled Pressure off to 0

Did back pressure valve hold? YES Pressured to _____ psi and held below _____ psi for _____ hrs.

Minimum WOC time 3 hrs.

Were full returns maintained while circulating and cementing? YES

Was pipe reciprocated while circulating and cementing? NO

(SKETCH AND COMMENTS ON REVERSE SIDE)

REMARKS (include volumes, types and sequence of placing various mixes)

CEMENTED WITH 415 SKS. CLASS "C" WITH 2% CA/CL. & 1/4" CELLULOSE.

MIXED TO 14.8" YIELD 1.34

CIRCULATED APPROXIMATELY 175 SKS TO PIT.

PLUG DOWN @ 3:45 P.M. 4-18-95

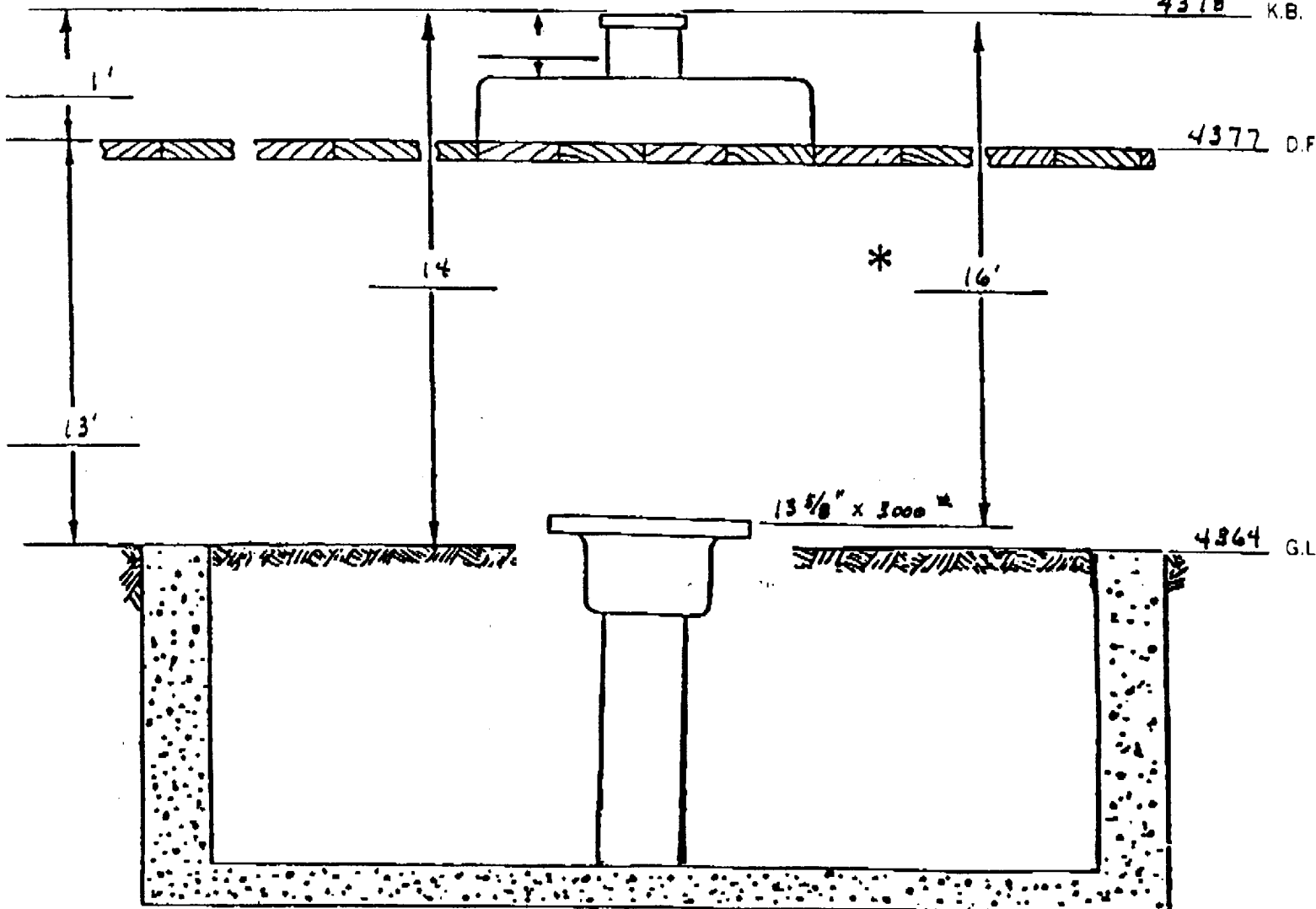
Insert all information available as each string is set.

Elevations

4378 K.B.

4377 D.F.

4364 G.L.



*Measure and record KB to BHF after installing head.

Signed

Mark R. Hall

RECEIVED

11 1935

CROSS
OFFICE

THE WESTERN COMPANY

APACHE CORPORATION

**STATE #28
SECTION 28, T8S & R32E
CHAVES COUNTY, NM
FUSSELMAN FORMATION**

CEMENTING RECOMMENDATION

PREPARED FOR

MR. RICK DAAB

SERVICE POINT

**ARTESIA, NM
(505) 746-3140**

MARCH 23, 1995

MD030034

PREPARED BY

**RANDALL EDGEMAN
TECH. REP.
MIDLAND**

SALES REPRESENTATIVE

**DOUG RALEY
HOUSTON SALES**

THE WESTERN COMPANY
CEMENTING RECOMMENDATION
SURFACE CASING

OPERATOR	APACHE CORPORATION
WELL	STATE #28
LOCATION	SECTION 28, T8S & R32E
COUNTY, STATE	CHAVES, NM
FORMATION	FUSSELMAN
PREPARED BY	RANDALL EDGEMAN
DATE	MARCH 23, 1995

ANNULAR GEOMETRIES

ANNULAR I.D. (IN)	DEPTH (FT)
17 1/2 HOLE	400

SUSPENDED PIPES

DIAMETER (IN)		DEPTH (FT)	WEIGHT (LB/FT)
O.D.	I.D.		
13 3/8	12.715	400	48.000

EST. STATIC TEMP.	80 DEG F
EST. CIRC. TEMP.	80 DEG F

THE WESTERN COMPANY
CEMENTING RECOMMENDATION
SURFACE CASING

VOLUME CALCULATIONS

400 FT X 0.6946 CU-FT/FT WITH 100 % EXCESS = 556 CU-FT

TOTAL SLURRY VOLUME: 556 CU-FT
99 BBLs

SLURRY NO.	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT	
1	556	/ 1.34	=	415 SACKS CLASS C
			+	2.000 % CACL2 + 0.25 LB/SK CELLO-SEAL
			+	56.000 % WATER

CEMENT PROPERTIES

**SLURRY
NO. 1**

SLURRY WEIGHT (LB/GAL)	14.81
SLURRY YIELD (CU-FT PER SACK)	1.34
AMOUNT OF MIX WATER (GALS PER SACK)	6.32
ESTIMATED PUMP TIME (HH:MM)	2:00

Apache Corp.

Well: State #28

Co: CHAVES N.M.

Surface casing

compressive strengths
12 (hr) 24 (hr) ~~72~~ (hr)

1700 2600 3700

inter string

slurry 1

slurry 2

340 500 725
900 1600 ~~2000~~

long string

stage ① slurry 1
slurry 2

244 415 775
2500 3000 3500

stage ② slurry 1
slurry 2

300 500 700
2500 3000 3500

PRODUCT DESCRIPTIONS

CLASS C CEMENT (API) [Premium Plus Cement]

Intended for use from surface to 6000 Ft., and for conditions requiring high early strength and/or sulfate resistance.

CALCIUM CHLORIDE (CaCl₂)

A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

CELLO-SEAL

Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

CF-14

A fluid loss control additive which provides excellent fluid loss control for primary and squeeze cementing operations from 80 to 260 Degrees Fahrenheit (BHCT). CF-14 is compatible with up to 18% salt (Sodium Chloride), Potassium Chloride, Calcium Chloride, lignosulfonate retarders and TF-4.

CF-14A

Salt or KCl compatible fluid loss control additive for cement that may reduce or eliminate the need for a retarder.

CF-2

A high molecular weight polymer used to reduce fluid loss in low and medium density cement slurries and cement slurries containing salt. It can be used at temperatures up to 200 Degrees Fahrenheit (BHCT).

DIACEL[®] LWL

A high molecular weight polymer used to reduce fluid loss from cement slurries. In addition to excellent fluid loss control, LWL is an effective retarder up to 240 Degrees Fahrenheit (BHCT).

[®]Registered Trademark of Drilling Specialties Company.

BENTONITE (GEL)

Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.

CLASS H CEMENT (API) [Premium Cement]

Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 Ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

PRODUCT DESCRIPTIONS

POZ A (FLY ASH)

A synthetic pozzalon, (primarily Silicon Dioxide). When blended with cement, Poz A can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

PACESETTER LITE PREMIUM [Class H (API) Cement Base]

A blend of Portland cement with Poz A at a ratio of 65:35, cement to Poz A. A small percentage of Bentonite is incorporated to help control free water. Depending on the density used, it can be a lightweight, economical filler slurry, or an intermediate density production cement. Pacesetter Lite slurries have good resistance to sulfate attack and also strength retrogression above 230 Degrees Fahrenheit (BHCT).

SODIUM CHLORIDE (NaCl)

Commonly called salt, is used to reduce damage caused by cement filtrate and to promote better bonding. At low concentration, less than 10% by weight of mixing water, it acts as an accelerator, while at concentrations greater than 15-18%, it will retard thickening time and strength development.

WMW-1

A water-base mud wash designed for use ahead of cement slurries to aid in mud and drilling debris removal and to prevent contamination of the cement slurry. It should be used only when water-base mud is used.