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ORIGINAL

# KANSAS CORPORATION COMMISSION
# OIL & GAS CONSERVATION DIVISION
# WELL COMPLETION FORM
## WELL HISTORY – DESCRIPTION OF WELL & LEASE

Form ACO-1
September 1999
**Form Must Be Typed**

Operator: License # 5447
Name: OXY USA Inc.
Address: P.O. Box 2528
City/State/Zip: Liberal, KS 67905
Purchaser: Pending
Operator Contact Person: Vicki Carder
Phone: (620) 629-4200
Contractor: Name: Murfin Drilling Co., Inc.
License: 30606
Wellsite Geologist: Tom Heflin
Designate Type of Completion:
X New Well ____ Re-Entry ____ Workover
X Oil ____ SWD ____ SIOW ____ Temp. Abd.
____ Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl, Cathodic, etc)
If Workover/Re-entry: Old Well Info as follows:
Operator: OXY USA, Inc.
Well Name: ____

Original Comp. Date: ____ Original Total Depth: ____
____ Deepening ____ Re-perf. ____ Conv. To Enhr./SWD
____ Plug Back ____ Plug Back Total Depth
____ Commingled Docket No. ____
____ Dual Completion Docket No. ____
____ Other (SWD or Enhr.?) Docket No. ____

| 07/08/03 | 07/18/03 | 08/26/03 |
|---|---|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |

API No. 15 - 067-21545-0000
County: Grant
SW - SE - SE - NE Sec 24 Twp. 27 S. R 35W
2431 feet from S (N) *(circle one)* Line of Section
532 feet from (E) W *(circle one)* Line of Section
Footages Calculated from Nearest Outside Section Corner:
*(circle one)* (NE) SE NW SW
Lease Name: Baughman AB Well #: 2
Field Name: Ladner
Producing Formation: Morrow
Elevation: Ground: 3044 Kelly Bushing: 3055
Total Depth: 5600 Plug Back Total Depth: 5474
Amount of Surface Pipe Set and Cemented at 1215 feet
Multiple Stage Cementing Collar Used? ☒ Yes ☐ No
If yes, show depth set 3150
If Alternate II completion, cement circulated from ____
feet depth to ____ w/ ____ sx cmt.

Drilling Fluid Management Plan ALT I — 2-3-05
*(Data must be collected from the Reserve Pit)*
Chloride content 1150 ppm Fluid volume 1550 bbls
Dewatering method used Evaporation
Location of fluid disposal if hauled offsite:
Operator Name: ____
Lease Name: ____ License No.: ____
Quarter ____ Sec. ____ Twp. ____ S. R. ____ ☐ East ☒ West
County: ____ Docket No.: ____

INSTRUCTIONS: An original an two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market – Room 2078, Wichita, Kansas 6702, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTINGTICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Vicki Carder
Title: Capital Project Date November 7, 2003
Subscribed and sworn to before me this 7th day of Nov
20 03
Notary Public: Anita Peterson
Date Commission Expires: Oct. 1, 2005

ANITA PETERSON
MY COMMISSION EXPIRES
October 1, 2005

**KCC Office Use Only**

Denied Letter of Confidentiality Attached
If Denied, Yes ☒ Date: 11-12-03 DPW
____ Wireline Log Received
____ Geologist Report Received
____ UIC Distribution

Side Two

Operator Name: OXY USA Inc. Lease Name: Baughman AB Well #: 2

Sec. 24 Twp. 27 S. R. 35W ☐ East ☐ West County: Grant

**Instructions:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copyof all Electric Wireline Logs surveyed. Attach final geological well site report.

| | | |
|---|---|---|
| Drill Stem Tests Taken *(Attach Additional Sheets)* | ☒ Yes | ☐ No |
| Samples Sent to Geological Survey | ☒ Yes | ☐ No |
| Cores Taken | ☐ Yes | ☒ No |
| Electric Log Run *(Submit Copy)* | ☒ Yes | ☐ No |

List All E. Logs Run: Sonic, Microlog, Induction, Neutron, Geological Report

☒ Log Formation (Top), Depth and Datum ☐ Sample

| Name | Top | Datum |
|---|---|---|
| Heebner | 3974 | -919 |
| Lansing | 4022 | -967 |
| Marmaton | 4645 | -1590 |
| Cherokee | 4796 | -1741 |
| Atoka | 5042 | -1987 |
| Morrow | 5101 | -2046 |
| Chester | 5350 | -2295 |

(See Side Three)

CASING RECORD ☒ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

| Purpose of String | Size Hole Drilled | Size Casing Set(in. O.D.) | Weight Lbs./ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|---|---|---|
| Conductor | 17 1/2 | 13 3/8 | 54.5 | 1215 | C | 940 | 35/65 Poz + Additives (See Cmt Tkt for Add.) |
| Surface | 12 1/4 | 8 5/8 | 24 | 1920 | C | 565 | 35/65 Poz + Additives (See Cmt Tkt for Add.) |
| Production | 7 7/8 | 5 1/2 | 15.5 | 5562 | H | 190 | 50/50 Lite Poz (See Cmt Tkt for Add.) |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | #Sacks Used | Type and Percent Additives |
|---|---|---|---|---|
| ____ Perforate | | | | |
| X Protect Casing | 2500-3150 | H | 200 | Port Collar - 50/50 Lite Poz(See Cmt Tkt for additives) |
| ____ Plug Back TD | - | | | |
| ____ Plug off Zone | | | | |

| Shots Per Foot | PERFORATION RECORD – Bridge Plugs Set/type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)* | *Depth* |
|---|---|---|---|
| 4 | 5210-5226 | Acidize - 48 bbls 17% HCL, FE-MCA | |
| 3 | 5190-5200, 5184-5186, 5166-5168, 5150-5151 | Acidize - 3000 gls 17% MCA-FE | |
| | | Frac - 60Mgls x-linked Gel, 137 Mlbs 16/30 Sand | |
| | | | |
| | | | |

| TUBING RECORD | Size | Set At | Packer At | Liner Run |
|---|---|---|---|---|
| | 2 3/8 | 5251 | | ☐ Yes ☒ No |

| Date of First, Resumed Production, SWD or Enhr. | Producing Method |
|---|---|
| 08/27/03 | ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other *(Explain)* |

| Estimated Production Per 24 Hours | Oil BBLS | Gas Mcf | Water Bbls | Gas-Oil Ratio | Gravity |
|---|---|---|---|---|---|
| | 9.5 | | 9.5 | | |

Disposition of Gas

☐ Vented ☐ Sold ☒ Used on Lease
*(If vented, Submit ACO-18)*

METHOD OF COMPLETION

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled

☐ Other *(Specify)*

Production Interval

Side Three

Operator Name: OXY USA Inc. Lease Name: Baughman AB Well #: 2

Sec. 24 Twp. 27 S. R. 35W ☐ East ☐ West County: Grant

| Name | Top | Datum |
|---|---|---|
| St. Genevieve | 5452 | -2397 |
| St. Louis | 5526 | -2471 |

Schlumberger

# Service Order

2003-Nov-07

| Customer | Person Taking Call | Dowell Location | OrderDate | Job Number |
|---|---|---|---|---|
| OXY USA, INC. | Lingo, Monty | Perryton, TX | 2003-Apr-07 | 2205543467 |

| Well Name and Number | Legal Location | Field | County | State/Province |
|---|---|---|---|---|
| BAUGHMAN A-2 | | | GRANT | KANSAS |

| Well Master: | API / UWI: |
|---|---|
| 0630514120 | |

| Rig Name | Well Age | Sales Engineer | Job Type |
|---|---|---|---|
| | New | Cothren, Randy | BlkSqz Rpr Prod. Casing |

| Time Well Ready: | Deviation | Bit Size | Well MD | Well TVD | BHP | BHST | BHCT |
|---|---|---|---|---|---|---|---|
| 7/30/2003 9:00 AM | 0 ° | 0 in | 3,000 ft | 3,000 ft | 3000 psi | 129 °F | 110 °F |

| Treat Down | Packer Type | Packer Depth | WellHead Connection | HHP on Location | Max AllowedPressure | Max Allowed AnnPressure |
|---|---|---|---|---|---|---|
| Tubing | None | 0 ft | 2 3/8 TUBING | | 3000 | |

**Casing**

| Depth, ft | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| 3000 | 5.5 | 15.5 | | |

**Tubing**

| Depth, | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| 2999 | 2.375 | 4.7 | | |

**Perforated Intervals**

| Top, ft | Bottom, ft | spf | No. of Shots | Total Interval ft |
|---|---|---|---|---|
| | | | | Diameter in |

**Services Instructions:**

CEMENT PORT COLLAR WITH THRU 2 3/8 TUBING WITH;
200 SACKS 50:50 POZ H + ADDS

**Extra Equipment:**

1 ABT
1 PUMP
1 CEMCAT

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**Expected On Location:** 7/30/2003 9:00 AM **Ready To Pump:** 7/30/2003 10:00 AM

| Contact | Voice | Mobile | FAX | Notes |
|---|---|---|---|---|
| GREG FILLPOT | 1-620-353-8669 | 1-320-329-4247 | | |

**Notes:**

PUMP JOB VIA 2 3/8 TUBING

**Directions:**

NORTH OF LIBERAL === ON HWY 83 TO HITCHFEEDER ROAD === 12 MILES WEST ON HITCHFEEDER ROAD == 3/4 MIL;E NORTH == WEST INTO

**Other Notes:**

BE SAFE!!! STAY IN GREEN!!!

**Comments:**

**Fluid Systems:**

**CEMENT**

200 SACKS 50:50 POZ H+2%D20+5 PPS D42+5 PPS D53+0.25%D059+0.25%D65+3%KCL+0.2%D46

| | | | | | |
|---|---|---|---|---|---|
| *Density:* | 13.8 | lb/gal | *Thickening Time:* | 3 | HRS |
| *Yield:* | 1.55 | ft³/sk | | | |
| *H2O Mix:* | 7.1 | gal/sk | | | |
| *H2O:* | 1420 | gal | *Eq. Sack Weight:* | 86.5 | lb |
| | | | *Total Blend:* | 200 | sacks |

| Dowell Code | Conc/Amount | | Total Quantity |
|---|---|---|---|
| D046 | 0.173 | lbs/sk | 34.6 |
| M117 | 2.595 | lt s/sk | 519 |
| D065 | 0.216 | lbs/sk | 43.2 |
| D059 | 0.216 | lbs/sk | 43.2 |
| D053 | 5 | lbs/sk | 1000 |
| D042 | 5 | lbs/sk | 1000 |
| D020 | 1.73 | lbs/sk | 346 |
| POZ | 39.5 | lbs/sk | 7900 |
| CLASS H | 47 | lbs/sk | 9400 |

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| Time mm:dd:yyyy:hh:mm:ss | Treating Pressure psi | Flow Rate bbl/min | Density lb/gal | Volume bbl |
|---|---|---|---|---|
| 07:30:2003:10:14:38 | 0 | 0.0 | 8.21 | 0.0 |
| 07:30:2003:10:14:44 | Pressure Test Lines | | | |
| 07:30:2003:10:14:44 | 0 | 0.0 | 8.12 | 0.0 |
| 07:30:2003:10:15:08 | 0 | 0.0 | 8.24 | 0.0 |
| 07:30:2003:10:15:38 | 55 | 0.1 | 8.35 | 0.0 |
| 07:30:2003:10:16:08 | 211 | 0.9 | 8.35 | 0.6 |
| 07:30:2003:10:16:38 | 1657 | 0.0 | 8.35 | 1.2 |
| 07:30:2003:10:17:08 | 1677 | 0.0 | 8.36 | 1.2 |
| 07:30:2003:10:17:38 | 1672 | 0.0 | 8.36 | 1.2 |
| 07:30:2003:10:18:08 | 1662 | 0.0 | 8.36 | 1.2 |
| 07:30:2003:10:18:38 | 1620 | 0.0 | 8.37 | 1.2 |
| 07:30:2003:10:19:09 | 1701 | 0.0 | 8.37 | 1.2 |
| 07:30:2003:10:19:39 | 1693 | 0.0 | 8.37 | 1.2 |
| 07:30:2003:10:20:09 | 577 | 0.0 | 8.36 | 1.2 |
| 07:30:2003:10:20:39 | 37 | 0.0 | 8.36 | 1.2 |
| 07:30:2003:10:21:09 | 256 | 2.1 | 8.36 | 1.5 |
| 07:30:2003:10:21:39 | 1826 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:22:09 | 1780 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:22:39 | 1609 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:23:09 | 538 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:23:38 | Reset Total, Vol = 2.20 bbl | | | |
| 07:30:2003:10:23:38 | 521 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:23:39 | 521 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:24:09 | 77 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:24:39 | 78 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:25:09 | 78 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:25:15 | Start Pumping Spacer | | | |
| 07:30:2003:10:25:15 | 78 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:25:39 | 78 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:26:09 | 78 | 0.0 | 8.35 | 2.2 |
| 07:30:2003:10:26:39 | 137 | 0.0 | 8.38 | 2.4 |
| 07:30:2003:10:27:09 | 520 | 2.9 | 8.35 | 3.4 |
| 07:30:2003:10:27:39 | 766 | 3.7 | 8.35 | 5.1 |
| 07:30:2003:10:28:09 | 769 | 3.7 | 8.35 | 6.9 |
| 07:30:2003:10:28:29 | Reset Total, Vol = 5.98 bbl | | | |
| 07:30:2003:10:28:29 | 785 | 3.7 | 8.35 | 8.2 |
| 07:30:2003:10:28:30 | Start Pumping Wash | | | |
| 07:30:2003:10:28:30 | 785 | 3.7 | 8.35 | 8.2 |
| 07:30:2003:10:28:39 | 795 | 3.7 | 8.35 | 8.8 |
| 07:30:2003:10:29:09 | 823 | 3.7 | 8.35 | 10.7 |
| 07:30:2003:10:29:39 | 834 | 3.8 | 8.35 | 12.5 |
| 07:30:2003:10:30:09 | 832 | 3.8 | 8.37 | 14.4 |
| 07:30:2003:10:30:40 | 809 | 3.8 | 8.90 | 16.4 |
| 07:30:2003:10:31:02 | Reset Total, Vol = 9.49 bbl | | | |
| 07:30:2003:10:31:02 | 808 | 3.8 | 8.47 | 17.7 |
| 07:30:2003:10:31:03 | Start Pumping Spacer | | | |
| 07:30:2003:10:31:03 | 810 | 3.8 | 8.47 | 17.8 |
| 07:30:2003:10:31:10 | 820 | 3.8 | 8.45 | 18.2 |
| 07:30:2003:10:31:40 | 796 | 3.8 | 8.72 | 20.1 |
| 07:30:2003:10:32:10 | 785 | 3.8 | 8.61 | 22.0 |
| 07:30:2003:10:32:36 | Start Cement Slurry | | | |
| 07:30:2003:10:32:36 | 783 | 3.8 | 8.59 | 23.7 |
| 07:30:2003:10:32:40 | 780 | 3.8 | 8.88 | 23.9 |
| 07:30:2003:10:33:06 | Reset Total, Vol = 8.19 bbl | | | |
| 07:30:2003:10:33:06 | 1061 | 4.9 | 12.12 | 25.9 |
| 07:30:2003:10:33:10 | 1059 | 4.9 | 12.37 | 26.3 |
| 07:30:2003:10:33:40 | 1059 | 4.7 | 14.17 | 28.6 |
| 07:30:2003:10:34:10 | 1085 | 4.6 | 14.61 | 31.0 |
| 07:30:2003:10:34:40 | 1104 | 4.6 | 14.34 | 33.3 |
| 07:30:2003:10:35:10 | 1100 | 4.6 | 13.88 | 35.5 |

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| | | | | |
|---|---|---|---|---|
| 07:30:2003:10:35:40 | 1107 | 4.6 | 14.14 | 37.8 |
| 07:30:2003:10:36:10 | 1114 | 4.5 | 14.50 | 40.1 |
| 07:30:2003:10:36:40 | 1117 | 4.5 | 14.01 | 42.4 |
| 07:30:2003:10:37:10 | 1125 | 4.6 | 13.97 | 44.6 |
| 07:30:2003:10:37:40 | 1120 | 4.6 | 13.95 | 46.9 |
| 07:30:2003:10:38:10 | 1104 | 4.6 | 14.17 | 49.2 |
| 07:30:2003:10:38:40 | 1101 | 4.5 | 14.32 | 51.5 |
| 07:30:2003:10:39:10 | 1101 | 4.6 | 14.40 | 53.8 |
| 07:30:2003:10:39:40 | 1091 | 4.5 | 14.09 | 56.1 |
| 07:30:2003:10:40:10 | 1090 | 4.4 | 13.99 | 58.4 |
| 07:30:2003:10:40:40 | 867 | 4.3 | 14.18 | 60.5 |
| 07:30:2003:10:41:10 | 1113 | 4.6 | 14.01 | 62.8 |
| 07:30:2003:10:41:41 | 1116 | 4.6 | 13.94 | 65.1 |
| 07:30:2003:10:42:11 | 1121 | 4.6 | 13.95 | 67.4 |
| 07:30:2003:10:42:41 | 1116 | 4.6 | 14.07 | 69.7 |
| 07:30:2003:10:43:11 | 1115 | 4.5 | 14.13 | 72.0 |
| 07:30:2003:10:43:41 | 954 | 4.2 | 14.21 | 74.1 |
| 07:30:2003:10:44:11 | 981 | 4.2 | 14.22 | 76.3 |
| 07:30:2003:10:44:41 | 988 | 4.2 | 14.23 | 78.4 |
| 07:30:2003:10:45:11 | 1259 | 4.4 | 13.83 | 80.6 |
| 07:30:2003:10:45:41 | 1228 | 4.2 | 13.80 | 82.7 |
| 07:30:2003:10:46:11 | 69 | 0.0 | 13.69 | 84.7 |
| 07:30:2003:10:46:16 | Stop Pumping | | | |
| 07:30:2003:10:46:16 | 0 | 0.0 | 13.67 | 84.7 |
| 07:30:2003:10:46:19 | Reset Total, Vol = 58.80 bbl | | | |
| 07:30:2003:10:46:19 | 0 | 0.0 | 13.67 | 84.7 |
| 07:30:2003:10:46:41 | -5 | 0.0 | 13.66 | 84.7 |
| 07:30:2003:10:47:06 | Start Displacement | | | |
| 07:30:2003:10:47:06 | -5 | 0.0 | 13.53 | 84.7 |
| 07:30:2003:10:47:11 | 60 | 2.7 | 12.34 | 84.8 |
| 07:30:2003:10:47:41 | 59 | 4.7 | 8.97 | 86.9 |
| 07:30:2003:10:48:11 | 1265 | 4.3 | 8.86 | 89.0 |
| 07:30:2003:10:48:41 | 1237 | 4.4 | 8.62 | 91.2 |
| 07:30:2003:10:49:11 | 1223 | 4.4 | 8.41 | 93.4 |
| 07:30:2003:10:49:41 | 792 | 3.4 | 8.40 | 95.6 |
| 07:30:2003:10:50:11 | 279 | 0.0 | 8.41 | 96.2 |
| 07:30:2003:10:50:28 | Reset Total, Vol = 11.50 bbl | | | |
| 07:30:2003:10:50:28 | 236 | 0.0 | 8.41 | 96.2 |
| 07:30:2003:10:50:41 | 230 | 0.0 | 8.41 | 96.2 |
| 07:30:2003:10:51:11 | 1278 | 2.4 | 8.45 | 96.8 |
| 07:30:2003:10:51:41 | 1862 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:52:11 | 1847 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:52:41 | -5 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:52:49 | Stop Pumping | | | |
| 07:30:2003:10:52:49 | -5 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:52:52 | Pressure Test Lines | | | |
| 07:30:2003:10:52:52 | -5 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:53:12 | -4 | 0.0 | 8.45 | 97.0 |
| 07:30:2003:10:53:42 | 0 | 0.0 | 8.44 | 97.0 |
| 07:30:2003:10:54:12 | -5 | 0.0 | 8.43 | 97.0 |
| 07:30:2003:10:54:42 | -5 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:55:12 | 0 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:55:42 | 0 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:55:50 | Wash Lines | | | |
| 07:30:2003:10:55:50 | 0 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:56:12 | 0 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:56:42 | 0 | 0.0 | 8.41 | 97.0 |
| 07:30:2003:10:57:12 | 36 | 0.0 | 8.54 | 97.0 |
| 07:30:2003:10:57:42 | 27 | 0.6 | 9.32 | 97.0 |
| 07:30:2003:10:58:12 | 29 | 0.5 | 9.34 | 97.2 |
| 07:30:2003:10:58:42 | 27 | 0.5 | 9.50 | 97.5 |
| 07:30:2003:10:59:12 | 55 | 0.5 | 8.43 | 97.8 |
| 07:30:2003:10:59:42 | 53 | 0.5 | 8.41 | 98.0 |

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| | | | | |
|---|---|---|---|---|
| 07:30:2003:11:00:12 | 0 | 0.0 | 8.60 | 98.1 |
| 07:30:2003:11:00:42 | -5 | 0.0 | 8.60 | 98.1 |
| 07:30:2003:11:01:12 | 0 | 0.0 | 13.16 | 98.1 |
| 07:30:2003:11:01:42 | 0 | 0.0 | 12.30 | 98.1 |
| 07:30:2003:11:01:55 | reverse circulate | | | |
| 07:30:2003:11:01:55 | -5 | 0.0 | 11.98 | 98.1 |
| 07:30:2003:11:02:12 | 0 | 0.0 | 11.62 | 98.1 |
| 07:30:2003:11:02:42 | -5 | 0.0 | 11.14 | 98.1 |
| 07:30:2003:11:03:12 | 0 | 0.0 | 10.57 | 98.1 |
| 07:30:2003:11:03:42 | 60 | 0.0 | 8.49 | 98.1 |
| 07:30:2003:11:04:12 | 350 | 2.9 | 8.36 | 99.2 |
| 07:30:2003:11:04:43 | 511 | 2.9 | 8.36 | 100.7 |
| 07:30:2003:11:05:13 | 625 | 2.9 | 8.36 | 102.1 |
| 07:30:2003:11:05:43 | 627 | 2.9 | 8.36 | 103.6 |
| 07:30:2003:11:06:13 | 626 | 2.9 | 8.37 | 105.0 |
| 07:30:2003:11:06:43 | 620 | 2.9 | 8.37 | 106.5 |
| 07:30:2003:11:07:13 | 599 | 2.9 | 8.37 | 108.0 |
| 07:30:2003:11:07:43 | 585 | 2.9 | 8.37 | 109.4 |
| 07:30:2003:11:08:13 | 549 | 2.9 | 8.37 | 110.9 |
| 07:30:2003:11:08:43 | 502 | 2.9 | 8.37 | 112.3 |
| 07:30:2003:11:09:13 | 407 | 2.9 | 8.37 | 113.8 |
| 07:30:2003:11:09:43 | 369 | 2.9 | 8.37 | 115.3 |
| 07:30:2003:11:10:13 | 371 | 2.9 | 8.37 | 116.7 |
| 07:30:2003:11:10:43 | 367 | 2.9 | 8.37 | 118.2 |
| 07:30:2003:11:11:13 | 367 | 2.9 | 8.37 | 119.6 |
| 07:30:2003:11:11:43 | 368 | 2.9 | 8.37 | 121.1 |
| 07:30:2003:11:12:13 | 367 | 2.9 | 8.37 | 122.6 |
| 07:30:2003:11:12:43 | -5 | 0.0 | 8.37 | 122.8 |
| 07:30:2003:11:13:10 | Reset Total, Vol = 24.78 bbl | | | |
| 07:30:2003:11:13:10 | 5 | 0.0 | 8.37 | 122.8 |
| 07:30:2003:11:13:13 | 5 | 0.0 | 8.37 | 0.0 |
| 07:30:2003:11:13:15 | END JOB | | | |
| 07:30:2003:11:13:15 | 5 | 0.0 | 8.37 | 0.0 |

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# FIELD ORDER 6579

Subject to Correction

ACID SERVICES, LLC

| | | | | |
|---|---|---|---|---|
| INVOICE NO. | | | | |
| Date 7-19-03 | Lease Baughman | Well # AB #2 | Legal 24-27S-35W | |
| Customer ID | County GRANT | State KS | Station LIBERAL | |
| CHARGE OXY USA | Depth 5567 | Formation | Shoe Joint 86 | |
| | Casing 5 1/2 | Casing Depth 5562 | TD | Job Type 5 1/2 L.S. new well |
| | Customer Representative GREG FILLPOT | | Treater Shawn FREDERICK | |
| AFE Number | PO Number | Materials Received by X Greg Fillpot | | |

| Product Code | QUANTITY | MATERIAL, EQUIPMENT and SERVICES USED | UNIT PRICE | AMOUNT | ACCOUNTING CORRECTION | ACCOUNTING AMOUNT |
|---|---|---|---|---|---|---|
| D104 | 205sk | 50/50 Poz PREMIUM | | | | |
| C311 | 885lb | CAL SET | | | | |
| C195 | 89lb | FLA-322 | | | | |
| C140 | 531lb | KCL | | | | |
| C321 | 885lb | Gilsonite | | | | |
| F143 | 1eq | TOP RUBBER PLUG 5 1/2 | | | | |
| F151 | 1eq | BOTTOM RUBBER Plug 5 1/2 | | | | |
| C302 | 500gal | MUD FLUSH | | | | |
| R701 | 1eq | CMT HEAD RENTAL | | | | |
| E107 | 205 sk | CMT SERVICE Charge | | | | |
| E100 | 60mi | UNITS 1 MILES 1 way | | | | |
| E104 | 531 Tm | TONS 9 MILES 60 | | | | |
| R211 | 1eq | EA. 2hrs PUMP CHARGE | | | | |
| | | DISCOUNTED TOTAL PLUS TAX | | | | 5,213.29 |

RECEIVED
NOV 10 2003
KCC WICHITA

10244 NE Hiway 61 · P.O. Box 8613 · Pratt, KS 67124-8613 · Phone (620) 672-1201 · Fax (620) 672-5383

TOTAL

Taylor Printing, Inc.

White - Accounting • Canary - Customer • Pink - Field Office

As consideration, the Customer agrees:

**a)** To pay ACID SERVICES, LLC in accord with the rates and terms stated in ACID SERVICES, LLC's current price list. Invoices are payable NET 30 after date of invoice. Upon Customers' default payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ attorneys to enforce collection of said account, Customer agrees to pay all collection cost and attorney fees in the amount of the unpaid account.

**b)** To defend, indemnify, release and hold harmless ACID SERVICES, LLC, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorney's fees, and costs of defense to the extent permitted by law for:

1. Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.

2. Reservoir, formation, or well loss or damage, subsurface trespass or any action in the nature thereof.

3. Personal injury of death or property damage ( including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material. The amount of this invoice is due and payable at ACID SERVICES, LLC, Dept. No. 1131, Tulsa, Oklahoma 74182. All terms of the Service Order with customer are incorporated herein and made a part hereof by reference.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by ACID SERVICES, LLC's negligence, strict liability, or operated. or furnished by ACID SERVICES, LLC or any defect in the data, products, supplies, materials, or equipment of ACID SERVICES, LLC whether the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of ACID SERVICES, LLC. The term "ACID SERVICES, LLC" as used in said Sections b) and c) shall mean ACID SERVICES, LLC, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.

**c)** That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, ACID SERVICES, LLC is unable to guarantee the effectiveness of the products, supplies, or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by ACID SERVICES, LLC. ACID SERVICES, LLC personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that ACID SERVICES, LLC shall not be liable for and Customer shall indemnify ACID SERVICES, LLC against any damages from the use of such information.

**d)** That ACID SERVICES, LLC warrants only title to the products, supplies, and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Acid Services LLC's liability and Customer's exclusive remedy in and cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials in expressly limited to the replacement of such products, supplies or materials on their return to ACID SERVICES, LLC or, at ACID SERVICES, LLC's option, to the allowance to the Customer of credit for the cost of such items. In no event shall ACID SERVICES, LLC be liable for special, incidental, indirect, punitive or consequential damages.

**e)** To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law. We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to service furnished under this contract.

**f)** That this contract shall be governed by the law of the state where services are performed or materials are furnished.

**g)** That ACID SERVICES, LLC shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized manager of ACID SERVICES, LLC.

# TREATMENT REPORT

ACID SERVICES LLC

| | | | |
|---|---|---|---|
| Customer ID | | Date | 7-19-03 |
| Customer | OXY | | |
| Lease | BAUCHMAN | Lease No. | Well # A13 #2 |
| Field Order # 6579 | Station LIBERAL | Casing 5 1/2 | Depth 5562 |
| County GRANT | State KS | | |
| Type Job 5 1/2 L.S. New well | Formation | Legal Description 24-32S-35W | |

| PIPE DATA | | PERFORATING DATA | | FLUID USED | TREATMENT RESUME | | |
|---|---|---|---|---|---|---|---|
| Casing Size 5 1/2 | Tubing Size | Shots/Ft | | Acid 50/50 POZ | RATE | PRESS | ISIP |
| Depth 5562 | Depth | From | To | Pre Pad | Max | | 5 Min. |
| Volume 130 | Volume | From | To | Pad | Min | | 10 Min. |
| Max Press 1500 | Max Press | From | To | Frac | Avg | | 15 Min. |
| Well Connection P.C. | Annulus Vol. | From | To | | HHP Used | | Annulus Pressure |
| Plug Depth | Packer Depth | From | To | Flush | Gas Volume | | Total Load |

| | | | |
|---|---|---|---|
| Customer Representative GREG FILPOT | Station Manager DICK MORRIS | Treater Shaun Frederich | |
| Service Units | 108 / 104 / 28 / 38 / 72 | | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|---|---|---|---|---|---|
| 2100 | | | | | ON LOCATION / RIG CIR |
| 2105 | | | | | SPOT EQUIPMENT |
| 2110 | | | | | RIG UP P.T. |
| 2200 | | | | | THROUGH CIR / HOOK UP P.C. |
| 2215 | | | | | PRE-JOB SAFETY MEETING |
| 2245 | | | 6 | 2 | PLUG RAT / MOUSE HOLE |
| 2248 | | | | | ~~BE~~ HOOK UP TO CASING |
| 2250 | 1500 | | | | PSI TEST |
| 2251 | 300 | | 5 | 5 | PUMP 5 BBLS FRESH WATER |
| 2253 | 300 | | 12 | 5 | PUMP 12 BBLS (500 gal) MUD FLUSH |
| 2255 | 300 | | 5 | 5 | PUMP 5 BBLS FRESH WATER |
| 2256 | 250 | | 14 | 5 | PUMP 20 SKS 50/50 POZ @ 10# SCAVENGER |
| 2300 | 200 | | | | SHUT DOWN / DROP BOTTOM PLUG |
| 2302 | 150 | | 43 | 5 | PUMP 170 SKS 50/50 POZ PREM |
| — | | | | | W/ 2% GEL / 3% KCL / 5# SK CALSET / 5# |
| — | | | | | SK GILSONITE / 5/10% FLA-322 @ 13.8# |
| 2310 | | | | | SHUT DOWN / DROP PLUG / WASH LINES |
| 2315 | 0 | | 130 TOTAL | 6 | PUMP DISP |
| 2330 | 500 | | (120 in) | 2 | SLOW RATE |
| 2335 | 1000 | | (130 in) | 2 | LAND PLUG |
| 2336 | | | | | RELEASE FLOAT - HELD / JOB COMPLETE |

10244 NE Hiway 61 • P.O. Box 8613 • Pratt, KS 67124-8613 • Phone (620) 672-1201 • Fax (620) 672-5383

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# Schlumberger

# Cementing Service Report

| Customer | | | | Job Number |
|---|---|---|---|---|
| OXY USA, INC. | | | | 2205543108 |
| Well | Location (legal) | Schlumberger Location | | Job Start |
| BAUGHMAN A-2 | | Perryton, TX | | 2003-Jul-11 |
| Field | Formation Name/Type | Deviation | Bit Size | Well MD / Well TVD |
| | | ° | 12.3 in | 1,924 ft / 1,924 ft |
| County | State/Province | BHP | BHST | BHCT / Pore Press. Gradient |
| GRANT | KANSAS | 1000 psi | 94 °F | 86 °F / psi/ft |
| Well Master: 0630514120 | API / UWI: | | | |

**Casing/Liner**

| Rig Name | Drilled For | Service Via | Depth, ft | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|---|---|---|
| | Oil & Gas | Land | 1921 | 8.63 | 24 | K55 | 8RD |

| Offshore Zone | Well Class | Well Type |
|---|---|---|
| | New | Exploration |

**Tubing/Drill Pipe**

| Drilling Fluid Type | Max. Density | Plastic Vi | Depth, | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|---|---|---|
| | lb/gal | cp | | | | | |
| | | | | | | | |

| Service Line | Job Type |
|---|---|
| Cementing | Cem Surface Casing |

**Perforations/Open Hole**

| Max. Allowed Tubing Pressure | Max. Allowed Ann. Pressure | WellHead Connection | Top, ft | Bottom, ft | spf | No. of Shots | Total Interval |
|---|---|---|---|---|---|---|---|
| 1000 psi | psi | 8 5/8 HS&M | | | | | ft |
| | | | | | | | Diameter |
| | | | | | | | in |

**Service Instructions**

CEMENT 8 5/8 IN SURFACE CASING WITH:

LEAD: 415 SKS 35:65 POZ C+ 6%D20 + 2%S1 + 0.25 PPS D29+0.2%D46
TAIL: 150 SKS CLASS C+2%S1+0.25 PPS D29

| Treat Down | Displacement | Packer Type | Packer Depth |
|---|---|---|---|
| Casing | 120.1 bbl | None | 0 ft |
| **Tubing Vol.** | **Casing Vol.** | **Annular Vol.** | **OpenHole Vol** |
| bbl | 122 bbl | 141 bbl | 264 bbl |

Casing/Tubing Secured ☑ 1 Hole Volume Circulated prior to Cementing ☑

| Lift Pressure: 415 psi | Pipe Rotated ☐ | Pipe Reciprocated ☐ |
|---|---|---|
| No. Centralizers: | Top Plugs: 1 | Bottom Plugs: 0 |
| Cement Head Type: Single | | |

| Job Scheduled For: | Arrived on Location: | Leave Location: |
|---|---|---|
| | 2003-Jul-11 4:00 | 2003-Jul-11 9:30 |

**Casing Tools**

| Shoe Type: Guide | Shoe Depth: 1921 ft |
|---|---|
| Stage Tool Type: | Stage Tool Depth: ft |
| Collar Type: Auto-Fill | Collar Depth: 1886 ft |

**Squeeze Job**

| Squeeze Type | Tool Type: | Tool Depth: ft | Tail Pipe Size: in | Tail Pipe Depth: ft | Sqz Total Vol: bbl |
|---|---|---|---|---|---|

| Date | Time (24 hr clock) | Treating Pressure psi | Flow Rate bbl/min | CMT DENS lb/gal | Volume bbl | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| 2003-Jul-11 | 7:33 | 0 | 0.9 | 8.37 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:33 | 0 | 0.9 | 8.37 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:33 | | | | | | | | Start Job |
| 2003-Jul-11 | 7:33 | 1112 | 0.2 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:34 | | | | | | | | Pressure Test Lines |
| 2003-Jul-11 | 7:34 | 2646 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:34 | 2563 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:34 | | | | | | | | Start Pumping Spacer |
| 2003-Jul-11 | 7:34 | 2431 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:35 | 50 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:35 | 64 | 2.0 | 8.35 | 0.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:36 | 110 | 4.7 | 8.35 | 2.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:36 | 124 | 5.2 | 8.35 | 4.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | 137 | 5.5 | 8.35 | 7.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | 142 | 5.5 | 8.35 | 10.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | 151 | 5.5 | 8.99 | 11.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | | | | | | | | End Spacer |
| 2003-Jul-11 | 7:37 | 146 | 5.5 | 9.17 | 11.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | | | | | | | | Reset Total, Vol = 11.93 bbl |
| 2003-Jul-11 | 7:37 | 146 | 5.5 | 9.42 | 0.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:37 | | | | | | | | Start Mixing Lead Slurry |
| 2003-Jul-11 | 7:38 | 146 | 5.6 | 10.04 | 0.9 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03192-Jul-11 | OXY USA, INC. | 2205543108 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:38 | 160 | 5.6 | 11.71 | 3.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:39 | 179 | 5.6 | 12.55 | 6.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:39 | 165 | 5.6 | 12.40 | 9.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:40 | 160 | 5.6 | 12.14 | 12.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:40 | 169 | 5.6 | 12.11 | 15.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:41 | 156 | 5.7 | 12.34 | 17.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:41 | 151 | 5.7 | 12.50 | 20.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:42 | 142 | 5.7 | 12.30 | 23.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:42 | 137 | 5.7 | 12.35 | 26.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:43 | 133 | 5.7 | 12.33 | 29.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:43 | 128 | 5.7 | 12.27 | 32.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:44 | 124 | 5.7 | 12.20 | 34.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:44 | 114 | 5.7 | 12.04 | 37.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:45 | 114 | 5.7 | 12.13 | 40.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:45 | 114 | 5.8 | 12.26 | 43.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:46 | 110 | 5.8 | 11.96 | 46.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:46 | 110 | 5.8 | 12.25 | 49.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:47 | 114 | 5.8 | 12.18 | 52.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:47 | 110 | 5.8 | 12.08 | 55.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:48 | 114 | 5.8 | 12.30 | 57.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:48 | 114 | 5.8 | 12.17 | 60.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:49 | 110 | 5.8 | 11.89 | 63.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:49 | 114 | 5.8 | 12.10 | 66.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:50 | 119 | 5.8 | 12.52 | 69.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:50 | 119 | 5.8 | 12.59 | 72.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:51 | 119 | 5.8 | 12.43 | 75.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:51 | 119 | 5.8 | 12.23 | 78.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:52 | 119 | 5.8 | 12.56 | 81.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:52 | 124 | 5.8 | 12.59 | 84.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:53 | 119 | 5.8 | 12.73 | 87.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:53 | 110 | 5.8 | 12.26 | 90.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:54 | 119 | 5.8 | 12.75 | 92.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:54 | 114 | 5.8 | 11.82 | 95.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:55 | 110 | 5.8 | 12.03 | 98.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:55 | 110 | 5.8 | 12.11 | 101.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:56 | 114 | 5.8 | 12.18 | 104.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:56 | 110 | 5.9 | 12.34 | 107.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:57 | 110 | 5.8 | 12.20 | 110.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:57 | 119 | 5.8 | 12.23 | 113.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:58 | 114 | 5.9 | 12.25 | 116.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:58 | 114 | 5.9 | 12.30 | 119.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:59 | 114 | 5.9 | 12.36 | 122.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 7:59 | 110 | 5.9 | 12.34 | 125.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:00 | 119 | 5.9 | 12.24 | 127.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:00 | 114 | 5.8 | 12.25 | 130.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:01 | 114 | 5.8 | 12.25 | 133.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:01 | 110 | 5.8 | 12.32 | 136.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:02 | 114 | 5.8 | 12.03 | 139.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:02 | 114 | 5.8 | 12.42 | 142.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:03 | 119 | 5.8 | 12.65 | 145.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:03 | 110 | 5.9 | 12.01 | 148.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:04 | 110 | 5.9 | 12.24 | 151.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:04 | 114 | 5.8 | 12.34 | 154.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:05 | 114 | 5.8 | 12.02 | 157.2 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03192-Jul-11 | OXY USA, INC. | 2205543108 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:05 | 110 | 5.9 | 12.35 | 160.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:06 | 114 | 5.8 | 12.49 | 163.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:06 | 114 | 5.8 | 12.50 | 166.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:07 | 114 | 5.9 | 12.36 | 168.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:07 | 114 | 5.9 | 12.46 | 171.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:08 | 114 | 5.9 | 12.52 | 174.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:08 | 114 | 5.9 | 12.65 | 177.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | 114 | 5.9 | 12.78 | 180.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | 82 | 5.0 | 12.82 | 183.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | | | | | | | | End Lead Slurry |
| 2003-Jul-11 | 8:09 | 82 | 5.0 | 12.92 | 183.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | 82 | 5.0 | 12.96 | 183.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | | | | | | | | Reset Total, Vol = 183.76 bbl |
| 2003-Jul-11 | 8:09 | 82 | 5.0 | 12.96 | 0.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:09 | | | | | | | | Start Mixing Tail Slurry |
| 2003-Jul-11 | 8:10 | 92 | 5.0 | 12.95 | 2.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:10 | 110 | 5.0 | 13.85 | 4.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:11 | 119 | 5.0 | 14.50 | 7.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:11 | 128 | 5.0 | 14.86 | 9.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:12 | 128 | 5.0 | 14.87 | 12.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:12 | 124 | 5.0 | 14.82 | 14.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:13 | 124 | 5.0 | 14.75 | 17.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:13 | 128 | 5.0 | 14.78 | 19.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:14 | 128 | 5.0 | 14.81 | 22.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:14 | 128 | 5.0 | 14.85 | 24.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:15 | 128 | 5.0 | 14.88 | 27.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:15 | 128 | 5.0 | 14.88 | 29.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:16 | 119 | 5.0 | 14.92 | 32.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:16 | 110 | 5.0 | 14.78 | 34.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | 114 | 5.0 | 14.68 | 37.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | 114 | 5.0 | 14.67 | 39.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | 27 | 0.0 | 14.60 | 40.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | | | | | | | | End Tail Slurry |
| 2003-Jul-11 | 8:17 | | | | | | | | Reset Total, Vol = 40.04 bbl |
| 2003-Jul-11 | 8:17 | -5 | 0.0 | 14.57 | 40.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | | | | | | | | Reset Total, Vol = 0.00 bbl |
| 2003-Jul-11 | 8:17 | 0 | 0.0 | 14.56 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | | | | | | | | Drop Top Plug |
| 2003-Jul-11 | 8:17 | -5 | 0.0 | 14.56 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:17 | | | | | | | | Start Displacement |
| 2003-Jul-11 | 8:17 | -5 | 0.0 | 10.49 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:18 | 0 | 0.0 | 15.12 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:18 | -5 | 0.0 | 12.15 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:19 | -5 | 0.0 | 9.77 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:19 | -9 | 0.0 | 8.99 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:20 | -5 | 0.0 | 8.99 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:20 | -5 | 0.0 | 8.98 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:21 | 60 | 5.2 | 8.83 | 2.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:21 | 60 | 5.2 | 8.83 | 4.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:22 | 64 | 5.6 | 8.36 | 7.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:22 | 60 | 5.6 | 8.36 | 10.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:23 | 64 | 5.7 | 8.43 | 13.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:23 | 60 | 5.6 | 8.37 | 15.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:24 | 60 | 5.6 | 8.36 | 18.6 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03192-Jul-11 | OXY USA, INC. | 2205543108 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:24 | 60 | 5.6 | 8.37 | 21.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:25 | 60 | 5.5 | 8.37 | 24.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:25 | 64 | 5.6 | 8.36 | 27.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:26 | 69 | 5.6 | 8.36 | 29.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:26 | 78 | 5.6 | 8.36 | 32.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:27 | 82 | 5.5 | 8.36 | 35.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:27 | 96 | 5.5 | 8.36 | 38.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:28 | 105 | 5.4 | 8.35 | 41.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:28 | 114 | 5.5 | 8.35 | 43.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:29 | 124 | 5.4 | 8.35 | 46.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:29 | 137 | 5.4 | 8.35 | 49.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:30 | 142 | 5.4 | 8.35 | 51.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:30 | 151 | 5.3 | 8.35 | 54.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:31 | 124 | 5.4 | 8.35 | 57.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:31 | 151 | 5.3 | 8.35 | 59.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:32 | 156 | 5.3 | 8.35 | 62.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:32 | 179 | 5.3 | 8.35 | 65.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:33 | 183 | 5.3 | 8.35 | 67.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:33 | 188 | 5.3 | 8.35 | 70.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:34 | 211 | 5.3 | 8.35 | 73.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:34 | 238 | 5.8 | 8.35 | 75.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:35 | 247 | 5.5 | 8.35 | 78.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:35 | 256 | 5.4 | 8.35 | 81.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:36 | 275 | 5.3 | 8.35 | 84.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:36 | 284 | 5.2 | 8.35 | 86.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:37 | 293 | 5.1 | 8.35 | 89.3 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:37 | 302 | 5.1 | 8.35 | 92.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:38 | 325 | 5.1 | 8.35 | 94.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:38 | 339 | 5.0 | 8.35 | 97.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:39 | 366 | 5.0 | 8.35 | 99.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:39 | 375 | 5.0 | 8.35 | 102.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:40 | 385 | 5.0 | 8.35 | 104.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:40 | 412 | 4.9 | 8.35 | 107.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:41 | 362 | 2.3 | 8.35 | 108.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:41 | 366 | 2.2 | 8.35 | 109.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:42 | 380 | 2.2 | 8.35 | 111.0 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:42 | 389 | 2.2 | 8.35 | 112.1 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:43 | 398 | 2.2 | 8.35 | 113.2 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:43 | 403 | 2.2 | 8.35 | 114.4 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:44 | 407 | 2.2 | 8.35 | 115.5 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:44 | 412 | 2.2 | 8.35 | 116.6 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:45 | 426 | 2.2 | 8.35 | 117.7 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:45 | 659 | 2.1 | 8.35 | 118.8 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:46 | 925 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:46 | | | | | | | | Bump Top Plug |
| 2003-Jul-11 | 8:46 | 925 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:46 | | | | | | | | End Displacement |
| 2003-Jul-11 | 8:46 | 925 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:46 | 920 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:47 | -9 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:47 | -14 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:47 | | | | | | | | End Job |
| 2003-Jul-11 | 8:47 | -9 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:48 | -9 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03192-Jul-11 | OXY USA, INC. | 2205543108 |

| Date | Time (24 hr clock) | Treating Pressure (psi) | Flow Rate (bbl/min) | CMT DENS (lb/gal) | Volume (bbl) | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:48 | -9 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |
| 2003-Jul-11 | 8:49 | -14 | 0.0 | 8.35 | 118.9 | 0 | 0 | 0 | |

## Post Job Summary

### Average Pump Rates, bpm

| Slurry | N2 | Mud | Maximum Rate |
|---|---|---|---|
| 5 | 0 | 0 | 6 |

### Volume of Fluid Injected, bbl

| Total Slurry | Mud | Spacer | N2 |
|---|---|---|---|
| 197 | 0 | 10 | |

### Treating Pressure Summary, psi

| Maximum | Final | Average | Bump Plug to | Breakdown |
|---|---|---|---|---|
| | | | 925 | |

### Breakdown Fluid

| Volume | Density |
|---|---|
| bbl | lb/gal |

| Avg. N2 Percent | Designed Slurry Volume | Displacement | Mix Water Temp | Cement Circulated to Surface? | Volume |
|---|---|---|---|---|---|
| % | 197 bbl | 120.1 bbl | °F | ☑ | 50 bbl |
| | | | | ☐ Washed Thru Perfs To | ft |

| Customer or Authorized Representative | Schlumberger Supervisor | | |
|---|---|---|---|
| Rice, David | Ahrends, Timothy | ☐ CirculationLost | ☑ Job Completed |

| | |
|---|---|
| Date | 7/9/2003 |
| Company | OXY |
| Job Number | 2205543108 |
| Well Name | Baughman |
| Well Number | AB A-2 |
| County | Grant |
| State | KS |

**Schlumberger**

| | | | |
|---|---|---|---|
| | Pipe Size | 8 5/8 | |
| | Pipe Weight | 24 | 24 |
| | Pipe Depth | 1921 | |
| | Shoe Length | 40 | |
| | Insert Depth | 1881 | |
| | Hole Size | 12 1/4 | |
| | Hole Depth | 1924 | |
| | Pipe Volume | 122 | |
| 264 | Annular Volume | 141 | |
| | Total Cement | 197 | |
| | Total Water | 317 | |

| | | | |
|---|---|---|---|
| | Pipe Factor | 0.0637 | 0.0637 |
| | Annular Factor | 0.0735 | |
| | Height Factor | 2.4231 | |

| | |
|---|---|
| Casing lift | 789 |
| Cement lift | 431 |

**1st System**

| | | |
|---|---|---|
| 415 | sacks | 35/65 POZ/C |
| 2.18 | yield | D20,S1,D29,D46 |
| 12.2 | weight | |
| 17.7 | | 175 |
| | cubic ft. | 905 |
| | height | 2192 |
| | bbls | 161 |

**2nd System**

| | | |
|---|---|---|
| 150 | sacks | Class C |
| 1.34 | yield | S1,D29 |
| 14.8 | weight | |
| 6.3 | water | 23 |
| | cubic ft. | 201 |
| | height | 487 |
| | bbls | 35.8 |

**3rd System**

| | | |
|---|---|---|
| 0 | sacks | |
| 0 | yield | |
| 0 | weight | |
| 0 | water | 0 |
| | cubic ft. | 0 |
| | height | 0 |
| | bbls | 0 |

**4th System**

| | | |
|---|---|---|
| | sacks | |
| | yield | |
| | weigh | |
| | water | 0 |
| | cubic ft. | 0 |
| | height | 0 |
| | bbls | 0 |

Test 2000 psi

Mud

10 Spacer

161 Lead 12.2

36 Tail 14.8

119.8 Displacement

2000 Maximum Pressure

Pump time @ 6 BPM 53 MIN

CONFIDENTIAL

Schlumberger

# Service Order

2003-Jul-08

| Customer | Person Taking Call | Dowell Location | OrderDate | Job Number |
|---|---|---|---|---|
| OXY USA, INC. | Lingo, Monty | Perryton, TX | 2003-Jun-27 | 2205543109 |

| Well Name and Number | Legal Location | Field | County | State/Province |
|---|---|---|---|---|
| BAUGHMAN A-2 | | | GRANT | KANSAS |

| Well Master: | API / UWI: |
|---|---|
| 0630514120 | |

| Rig Name | Well Age | Sales Engineer | Job Type |
|---|---|---|---|
| | New | Parra Bandala-Dolores, Maria | Cem Surface Casing |

| Time Well Ready: | Deviation | Bit Size | Well MD | Well TVD | BHP | BHST | BHCT |
|---|---|---|---|---|---|---|---|
| | ° | 17.5 in | 1,300 ft | 1,300 ft | 1000 psi | 94 °F | 86 °F |

| Treat Down | Packer Type | Packer Depth | WellHead Connection | HHP on Location | Max AllowedPressure | Max Allowed AnnPressure |
|---|---|---|---|---|---|---|
| Casing | None | 0 ft | 13 3/8 HS&M | | 1000 | |

**Casing**

| Depth, ft | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| 1300 | 13.38 | 54.5 | | |
| | | | | |

**Tubing**

| Depth, | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| | | | | |
| | | | | |

**Perforated Intervals**

| Top, ft | Bottom, ft | spf | No. of Shots | Total Interval |
|---|---|---|---|---|
| | | | | ft |
| | | | | Diameter |
| | | | | in |

**Services Instructions:**

CEMENT 13 3/8 IN SURFACE CASING WITH:

LEAD: 705 SKS 35:65 POZ C+ 6%D20 + 2%S1 + 0.25 PPS D29+0.2%D46
TAIL: 235 SKS CLASS C+2%S1+0.25 PPS D29

**Extra Equipment:**

3 ABTS
1 PUMP
1 CEMCAT

RECEIVED
NOV 10 2003
KCC WICHITA

**Expected On Location:**

**Ready To Pump:**

| Contact | Voice | Mobile | FAX | Notes |
|---|---|---|---|---|
| GREG PHILPOT | 620-353-8669 | | | |

**Notes:**

13 3/8: TOP PLUG

**Directions:**

NORTH OF LIBERAL === ON HWY 83 TO HITCHFEEDER ROAD === 12 MILES WEST ON HITCHFEEDER ROAD == 3/4 MIL;E NORTH == WEST INTO

**Other Notes:**

BE SAFE!!

**Comments:**

**Fluid Systems:**

| LEAD | | | | | |
|---|---|---|---|---|---|
| 705 SKS 35:65 POZ C+ 6%D20 + 2%S1 + 0.25 PPS D29+0.2%D46 | | | | | |
| *Density:* | 12.2 | lb/gal | *Thickening Time:* | | |
| *Yield:* | 2.17 | ft³/sk | | | |
| *H2O Mix:* | 17.7 | gal/sk | | | |
| *H2O:* | 12478.5 | gal | *Eq. Sack Weight:* | 88.75 | lb |
| | | | *Total Blend:* | 705 | sacks |

| Dowell Code | Conc/ Amount | | Total Quantity |
|---|---|---|---|
| CLASS C | 61.1 | lbs/sk | 43075.5 |
| POZ | 27.65 | lbs/sk | 19493.25 |
| D020 | 5.325 | lbs/sk | 3754.125 |
| S001 | 1.775 | lbs/sk | 1251.375 |
| D029 | 0.25 | lbs/sk | 176.25 |
| D046 | 0.188 | lbs/sk | 132.54 |

| TAIL | | | | | |
|---|---|---|---|---|---|
| 235 SKS CLASS C+2%S1+0.25 PPS D29 | | | | | |
| *Density:* | 14.8 | lb/gal | *Thickening Time:* | | |
| *Yield:* | 1.32 | ft³/sk | | | |
| *H2O Mix:* | 6.3 | gal/sk | | | |
| *H2O:* | 1480.5 | gal | *Eq. Sack Weight:* | 94 | lb |
| | | | *Total Blend:* | 235 | sacks |

| Dowell Code | Conc/ Amount | | Total Quantity |
|---|---|---|---|
| S001 | 1.88 | lbs/sk | 441.8 |
| D029 | 0.25 | lbs/sk | 58.75 |
| CLASS C | 94 | lbs/sk | 22090 |

# Schlumberger Cementing Service Report

| Customer | Job Number |
|---|---|
| OXY USA, INC. | 2205543109 |

| Well | Location (legal) | Schlumberger Location | Job Start |
|---|---|---|---|
| BAUGHMAN A-2 | | Perryton, TX | 2003-Jul-09 |

| Field | Formation Name/Type | Deviation | Bit Size | Well MD | Well TVD |
|---|---|---|---|---|---|
| | | ° | 17.5 in | 1,216 ft | 1,216 ft |

| County | State/Province | BHP | BHST | BHCT | Pore Press. Gradient |
|---|---|---|---|---|---|
| GRANT | KANSAS | 1000 psi | 94 °F | 86 °F | psi/ft |

Well Master: 0630514120 | API / UWI:

| Rig Name | Drilled For | Service Via |
|---|---|---|
| | Oil & Gas | Land |

| Offshore Zone | Well Class | Well Type |
|---|---|---|
| | New | Exploration |

| Drilling Fluid Type | Max. Density | Plastic Vi: |
|---|---|---|
| | lb/gal | cp |

| Service Line | Job Type |
|---|---|
| Cementing | Cem Surface Casing |

| Max. Allowed Tubing Pressure | Max. Allowed Ann. Pressure | WellHead Connection |
|---|---|---|
| 1000 psi | psi | 13 3/8 HS&M |

**Service Instructions**

CEMENT 13 3/8 IN SURFACE CASING WITH:

LEAD: 420 SKS 35:65 POZ C+ 6%D20 + 2%S1 + 0.25 PPS D29+0.2%D46
TAIL: 150 SKS CLASS C+2%S1+0.25 PPS D29

**Casing/Liner**

| Depth, ft | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| 1216 | 13.38 | 48 | | |
| | | | | |

**Tubing/Drill Pipe**

| Depth, | Size, in | Weight, lb/ft | Grade | Thread |
|---|---|---|---|---|
| | | | | |
| | | | | |

**Perforations/Open Hole**

| Top, ft | Bottom, ft | spf | No. of Shots | Total Interval |
|---|---|---|---|---|
| | | | | ft |
| | | | | Diameter |
| | | | | in |

| Treat Down | Displacement | Packer Type | Packer Depth |
|---|---|---|---|
| Casing | 185 bbl | None | 0 ft |

| Tubing Vol. | Casing Vol. | Annular Vol. | OpenHole Vol |
|---|---|---|---|
| bbl | 191 bbl | 150 bbl | 341 bbl |

Casing/Tubing Secured ☑ | 1 Hole Volume Circulated prior to Cementing ☑

Lift Pressure: 300 psi

Pipe Rotated ☐ | Pipe Reciprocated ☐

No. Centralizers: 3 | Top Plugs: 1 | Bottom Plugs: 0

Cement Head Type: Single

| Job Scheduled For: | Arrived on Location: | Leave Location: |
|---|---|---|
| | 2003-Jul-09 18:30 | 2003-Jul-10 0:30 |

**Casing Tools**

| | |
|---|---|
| Shoe Type: | None |
| Shoe Depth: | 1216 ft |
| Stage Tool Type: | |
| Stage Tool Depth: | ft |
| Collar Type: | None |
| Collar Depth: | ft |

**Squeeze Job**

| | |
|---|---|
| Squeeze Type | |
| Tool Type: | |
| Tool Depth: | ft |
| Tail Pipe Size: | in |
| Tail Pipe Depth: | ft |
| Sqz Total Vol: | bbl |

| Date | Time (24 hr clock) | Treating Pressure (psi) | Flow Rate (bbl/min) | CMT DENS (lb/gal) | Volume (bbl) | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| 2003-Jul-09 | 21:39 | -5 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:39 | | | | | | | | Start Job |
| 2003-Jul-09 | 21:39 | -5 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:40 | -5 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:40 | -5 | 0.0 | 8.35 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:41 | 2605 | 0.0 | 8.32 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:41 | 2325 | 0.0 | 8.32 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:41 | | | | | | | | Pressure Test Lines |
| 2003-Jul-09 | 21:41 | | | | | | | | Start Pumping Spacer |
| 2003-Jul-09 | 21:41 | 2303 | 0.0 | 8.32 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:42 | 2266 | 0.0 | 8.32 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:42 | 5 | 0.0 | 8.32 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:43 | 46 | 3.9 | 8.31 | 0.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:43 | 92 | 5.5 | 8.31 | 3.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:44 | 64 | 4.9 | 8.31 | 5.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:44 | 87 | 5.9 | 8.31 | 8.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | 82 | 5.9 | 8.41 | 11.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | | | | | | | | End Spacer |
| 2003-Jul-09 | 21:45 | 87 | 5.9 | 8.67 | 12.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | | | | | | | | Reset Total, Vol = 12.15 bbl |
| 2003-Jul-09 | 21:45 | 87 | 5.9 | 8.81 | 12.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | | | | | | | | Start Mixing Lead Slurry |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | 92 | 5.9 | 9.03 | 0.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:45 | 78 | 6.0 | 10.76 | 2.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:46 | 101 | 6.0 | 12.08 | 5.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:46 | 133 | 6.0 | 12.74 | 8.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:47 | 128 | 6.0 | 12.59 | 11.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:47 | 128 | 6.0 | 11.70 | 14.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:48 | 128 | 6.0 | 11.95 | 17.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:48 | 119 | 6.0 | 12.43 | 20.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:49 | 146 | 6.4 | 12.64 | 23.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:49 | 146 | 6.5 | 11.65 | 26.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:50 | 137 | 6.5 | 12.07 | 30.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:50 | 146 | 6.5 | 12.23 | 33.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:51 | 151 | 6.5 | 12.77 | 36.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:51 | 156 | 6.6 | 12.56 | 40.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:52 | 142 | 6.6 | 1.07 | 43.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:52 | 137 | 6.6 | 11.81 | 46.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:53 | 133 | 6.6 | 12.07 | 49.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:53 | 151 | 6.6 | 11.74 | 53.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:54 | 160 | 6.6 | 12.33 | 56.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:54 | 156 | 6.6 | 12.73 | 59.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:55 | 156 | 6.6 | 12.61 | 63.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:55 | 146 | 6.6 | 12.22 | 66.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:56 | 142 | 6.6 | 12.14 | 69.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:56 | 137 | 6.6 | 12.11 | 73.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:57 | 133 | 6.6 | 12.35 | 76.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:57 | 133 | 6.7 | 12.46 | 79.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:58 | 133 | 6.7 | 12.21 | 83.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:58 | 133 | 6.7 | 12.09 | 86.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:59 | 133 | 6.7 | 12.37 | 89.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 21:59 | 137 | 6.7 | 12.32 | 93.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:00 | 133 | 6.7 | 12.32 | 96.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:00 | 133 | 6.7 | 11.95 | 100.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:01 | 133 | 6.7 | 12.09 | 103.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:01 | 137 | 6.7 | 12.00 | 106.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:02 | 133 | 6.7 | 12.05 | 110.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:02 | 137 | 6.7 | 12.39 | 113.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:03 | 142 | 6.7 | 12.42 | 116.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:03 | 137 | 6.7 | 12.27 | 120.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:04 | 137 | 6.7 | 12.09 | 123.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:04 | 137 | 6.7 | 12.34 | 127.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:05 | 137 | 6.7 | 11.82 | 130.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:05 | 137 | 6.8 | 11.60 | 133.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:06 | 137 | 6.8 | 12.09 | 137.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:06 | 146 | 6.8 | 12.57 | 140.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:07 | 156 | 6.8 | 12.67 | 144.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:07 | 156 | 6.8 | 12.31 | 147.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:08 | 151 | 6.8 | 12.24 | 150.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:08 | 156 | 6.8 | 12.19 | 154.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:09 | 151 | 6.8 | 12.21 | 157.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:09 | 151 | 6.8 | 12.06 | 161.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:10 | 142 | 6.8 | 12.00 | 164.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:10 | 142 | 6.8 | 12.25 | 167.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:11 | 142 | 6.8 | 12.17 | 171.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:11 | 146 | 6.8 | 12.24 | 174.6 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:12 | 146 | 6.8 | 12.17 | 178.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:12 | 146 | 6.8 | 12.24 | 181.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:13 | 146 | 6.8 | 12.24 | 184.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:13 | 146 | 6.8 | 12.21 | 188.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:14 | 146 | 6.8 | 12.23 | 191.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:14 | 146 | 6.8 | 12.10 | 195.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:15 | 151 | 6.8 | 12.08 | 198.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:15 | 151 | 6.8 | 12.20 | 201.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:16 | 156 | 6.8 | 12.23 | 205.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:16 | 151 | 6.8 | 12.21 | 208.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:17 | 151 | 6.8 | 12.29 | 212.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:17 | 151 | 6.8 | 12.31 | 215.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:18 | 146 | 6.8 | 12.21 | 218.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:18 | 146 | 6.8 | 12.11 | 222.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:19 | 146 | 6.8 | 12.32 | 225.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:19 | 156 | 6.8 | 12.31 | 229.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:20 | 156 | 6.8 | 12.28 | 232.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:20 | 156 | 6.8 | 12.29 | 236.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:21 | 156 | 6.8 | 12.09 | 239.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:21 | 146 | 6.9 | 12.11 | 242.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:22 | 137 | 6.8 | 12.21 | 246.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:22 | 137 | 6.8 | 11.91 | 249.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:23 | 137 | 6.8 | 12.48 | 253.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:23 | 142 | 6.8 | 12.38 | 256.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:24 | 137 | 6.8 | 12.28 | 259.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:24 | 142 | 6.8 | 12.55 | 263.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:25 | 151 | 6.8 | 12.27 | 266.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:25 | 156 | 6.8 | 12.68 | 270.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:26 | 165 | 6.8 | 12.66 | 273.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:26 | 165 | 6.8 | 12.31 | 276.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:27 | 160 | 6.8 | 12.12 | 280.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:27 | 160 | 6.8 | 12.11 | 283.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:28 | 160 | 6.8 | 12.08 | 287.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:28 | 156 | 6.8 | 12.33 | 290.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:29 | 160 | 6.8 | 12.24 | 293.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:29 | 156 | 6.8 | 11.89 | 297.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:30 | 156 | 6.8 | 12.03 | 300.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:30 | 160 | 6.8 | 12.09 | 304.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:31 | 169 | 6.8 | 12.43 | 307.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:31 | 174 | 6.8 | 12.77 | 310.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:32 | 179 | 6.8 | 12.67 | 314.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:32 | 169 | 6.8 | 12.63 | 317.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:33 | 169 | 6.8 | 12.40 | 321.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:33 | 165 | 6.8 | 12.32 | 324.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:34 | 160 | 6.8 | 12.19 | 327.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:34 | 165 | 6.8 | 12.19 | 331.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:35 | 160 | 6.8 | 12.15 | 334.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:35 | 165 | 6.8 | 12.43 | 338.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:36 | 165 | 6.8 | 12.47 | 341.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:36 | 169 | 6.8 | 12.59 | 344.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:37 | 169 | 6.8 | 12.43 | 348.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:37 | 160 | 6.8 | 12.04 | 351.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:38 | 156 | 6.8 | 12.24 | 355.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:38 | 156 | 6.8 | 12.43 | 358.5 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:39 | 151 | 6.8 | 12.94 | 362.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:39 | | | | | | | | End Lead Slurry |
| 2003-Jul-09 | 22:39 | 160 | 6.8 | 13.37 | 363.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:39 | 160 | 6.8 | 13.40 | 363.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:39 | | | | | | | | Reset Total, Vol = 363.62 bbl |
| 2003-Jul-09 | 22:39 | 165 | 6.8 | 13.48 | 0.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:39 | | | | | | | | Start Mixing Tail Slurry |
| 2003-Jul-09 | 22:40 | 174 | 6.7 | 13.91 | 1.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:40 | 124 | 5.2 | 13.88 | 5.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:41 | 133 | 5.2 | 14.33 | 7.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:41 | 146 | 5.2 | 14.83 | 10.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:42 | 160 | 5.2 | 15.10 | 12.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:42 | 156 | 5.2 | 15.11 | 15.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:43 | 156 | 5.2 | 15.10 | 17.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:43 | 146 | 5.2 | 14.85 | 20.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:44 | 142 | 5.2 | 14.73 | 23.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:44 | 142 | 5.2 | 14.81 | 25.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:45 | 146 | 5.2 | 14.95 | 28.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:45 | 146 | 5.2 | 14.85 | 30.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:46 | 137 | 5.2 | 14.80 | 33.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:46 | 142 | 5.2 | 14.75 | 35.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:47 | 137 | 5.1 | 14.75 | 38.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:47 | 142 | 5.1 | 14.95 | 41.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:48 | 146 | 5.1 | 14.98 | 43.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:48 | 146 | 5.1 | 15.00 | 46.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:49 | 146 | 5.1 | 14.99 | 48.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:49 | 151 | 5.1 | 15.01 | 51.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:50 | 151 | 5.1 | 14.95 | 53.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:50 | 142 | 5.1 | 14.81 | 56.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | 137 | 5.1 | 14.67 | 59.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | | | | | | | | End Tail Slurry |
| 2003-Jul-09 | 22:51 | 0 | 0.0 | 10.53 | 59.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | 0 | 0.0 | 10.47 | 59.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | | | | | | | | Reset Total, Vol = 59.77 bbl |
| 2003-Jul-09 | 22:51 | 0 | 0.0 | 10.44 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | | | | | | | | Drop Top Plug |
| 2003-Jul-09 | 22:51 | | | | | | | | Start Displacement |
| 2003-Jul-09 | 22:51 | 0 | 0.0 | 10.43 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:51 | 0 | 0.0 | 10.38 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:52 | 0 | 0.0 | 11.80 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:52 | 0 | 0.0 | 8.95 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:53 | 0 | 0.0 | 8.73 | 0.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:53 | 50 | 3.0 | 8.77 | 0.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:54 | 64 | 5.2 | 8.66 | 2.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:54 | 60 | 5.2 | 8.60 | 5.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:55 | 60 | 5.6 | 8.36 | 7.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:55 | 55 | 5.7 | 8.38 | 10.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:56 | 60 | 5.7 | 8.38 | 13.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:56 | 55 | 5.7 | 8.35 | 16.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:57 | 55 | 5.7 | 8.35 | 19.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:57 | 55 | 5.7 | 8.35 | 22.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:58 | 55 | 5.7 | 8.35 | 24.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:58 | 69 | 6.3 | 8.35 | 27.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:59 | 69 | 6.4 | 8.35 | 31.0 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 22:59 | 69 | 6.3 | 8.35 | 34.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:00 | 69 | 6.3 | 8.35 | 37.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:00 | 69 | 6.4 | 8.35 | 40.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:01 | 73 | 6.3 | 8.35 | 43.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:01 | 73 | 6.4 | 8.35 | 46.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:02 | 78 | 6.4 | 8.35 | 50.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:02 | 82 | 6.4 | 8.38 | 53.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:03 | 82 | 6.4 | 8.35 | 56.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:03 | 82 | 6.4 | 8.35 | 59.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:04 | 92 | 6.4 | 8.35 | 62.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:04 | 92 | 6.4 | 8.35 | 66.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:05 | 96 | 6.4 | 8.35 | 69.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:05 | 105 | 6.4 | 8.35 | 72.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:06 | 105 | 6.4 | 8.35 | 75.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:06 | 105 | 6.4 | 8.35 | 78.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:07 | 110 | 6.4 | 8.35 | 82.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:07 | 119 | 6.4 | 8.35 | 85.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:08 | 119 | 6.4 | 8.35 | 88.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:08 | 128 | 6.4 | 8.35 | 91.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:09 | 128 | 6.4 | 8.35 | 94.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:09 | 137 | 6.4 | 8.35 | 98.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:10 | 142 | 6.4 | 8.35 | 101.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:10 | 101 | 4.1 | 8.35 | 104.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:11 | 92 | 4.0 | 8.35 | 106.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:11 | 96 | 4.0 | 8.35 | 108.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:12 | 101 | 4.0 | 8.35 | 110.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:12 | 105 | 4.0 | 8.35 | 112.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:13 | 110 | 4.0 | 8.35 | 114.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:13 | 110 | 4.0 | 8.35 | 116.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:14 | 119 | 4.0 | 8.35 | 118.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:14 | 124 | 4.0 | 8.35 | 120.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:15 | 133 | 4.0 | 8.35 | 122.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:15 | 133 | 4.0 | 8.35 | 124.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:16 | 142 | 4.0 | 8.35 | 126.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:16 | 156 | 4.0 | 8.35 | 128.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:17 | 146 | 4.0 | 8.35 | 130.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:17 | 160 | 4.0 | 8.35 | 132.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:18 | 165 | 4.0 | 8.35 | 134.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:18 | 179 | 4.0 | 8.35 | 136.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:19 | 179 | 4.0 | 8.35 | 138.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:19 | 188 | 3.9 | 8.35 | 140.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:20 | 188 | 4.0 | 8.35 | 142.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:20 | 201 | 4.0 | 8.35 | 144.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:21 | 206 | 4.0 | 8.35 | 146.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:21 | 211 | 3.9 | 8.35 | 148.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:22 | 224 | 4.0 | 8.35 | 150.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:22 | 215 | 3.0 | 8.35 | 151.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:23 | 220 | 3.0 | 8.35 | 158.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:23 | 201 | 1.2 | 8.35 | 159.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:24 | 197 | 0.3 | 8.35 | 160.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:24 | 197 | 0.4 | 8.35 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:25 | 188 | 0.0 | 8.35 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:25 | 183 | 0.0 | 8.35 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:26 | 183 | 0.0 | 8.35 | 160.3 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:26 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:27 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:27 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:28 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:28 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:29 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:29 | 183 | 0.0 | 8.34 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:30 | 183 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:30 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:31 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:31 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:32 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:32 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:33 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:33 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:34 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:34 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:35 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:35 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:36 | 179 | 0.0 | 8.33 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:36 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:37 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:37 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:38 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:38 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:39 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:39 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:40 | 174 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:40 | 169 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:41 | 169 | 0.0 | 8.31 | 160.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:41 | 201 | 1.1 | 8.31 | 160.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:42 | 206 | 1.1 | 8.31 | 161.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:42 | 206 | 1.1 | 8.32 | 161.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:43 | 215 | 1.1 | 8.32 | 162.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:43 | 211 | 1.6 | 8.32 | 162.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:44 | 206 | 1.8 | 8.33 | 163.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:44 | 201 | 1.8 | 8.33 | 164.6 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:45 | 238 | 1.8 | 8.33 | 165.5 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:45 | 270 | 1.8 | 8.33 | 166.4 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:46 | 229 | 1.8 | 8.33 | 167.3 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:46 | 229 | 1.8 | 8.33 | 168.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:47 | 215 | 1.8 | 8.33 | 169.1 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:47 | 284 | 1.8 | 8.33 | 170.0 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:48 | 229 | 1.8 | 8.33 | 170.9 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:48 | 233 | 1.8 | 8.33 | 171.8 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:49 | 238 | 1.9 | 8.33 | 172.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:49 | 279 | 3.0 | 8.33 | 174.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:50 | 279 | 3.0 | 8.33 | 175.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:50 | 284 | 3.0 | 8.33 | 177.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:51 | 288 | 3.0 | 8.33 | 178.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:51 | 293 | 3.0 | 8.33 | 180.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:52 | 302 | 3.0 | 8.33 | 181.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:52 | 307 | 3.0 | 8.33 | 183.2 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:53 | 316 | 3.0 | 8.33 | 184.7 | 0 | 0 | 0 | |

| Well | Field | Service Date | Customer | Job Number |
|---|---|---|---|---|
| BAUGHMAN #A-2 | | 03190-Jul-09 | OXY USA, INC. | 2205543109 |

| Date | Time | Treating Pressure | Flow Rate | CMT DENS | Volume | 0 | 0 | 0 | Message |
|---|---|---|---|---|---|---|---|---|---|
| | 24 hr clock | psi | bbl/min | lb/gal | bbl | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:53 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:54 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:54 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:54 | | | | | | | | End Displacement |
| 2003-Jul-09 | 23:54 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:54 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |
| 2003-Jul-09 | 23:54 | | | | | | | | End Job |
| 2003-Jul-09 | 23:54 | | | | | | | | Reset Total, Vol = 184.74 bbl |
| 2003-Jul-09 | 23:54 | 256 | 0.0 | 8.33 | 184.7 | 0 | 0 | 0 | |

## Post Job Summary

Average Pump Rates, bpm

| Slurry | N2 | Mud | Maximum Rate |
|---|---|---|---|
| 6 | 0 | 0 | 7 |

Volume of Fluid Injected, bbl

| Total Slurry | Mud | Spacer | N2 |
|---|---|---|---|
| 423 | 0 | 10 | |

Treating Pressure Summary, psi

| Maximum | Final | Average | Bump Plug to | Breakdown |
|---|---|---|---|---|
| | | | | |

Breakdown Fluid

| Volume | Density |
|---|---|
| bbl | lb/gal |

| Avg. N2 Percent | Designed Slurry Volume | Displacement | Mix Water Temp |
|---|---|---|---|
| % | 329 bbl | 185 bbl | °F |

☑ Cement Circulated to Surface? Volume 70 bbl

☐ Washed Thru Perfs To ft

| Customer or Authorized Representative | Schlumberger Supervisor | | |
|---|---|---|---|
| Fillpot, Greg | Ahrends, Timothy | ☐ CirculationLost | ☑ Job Completed |