

INDIAN WELLS OIL COMPANY
University 2-2
Section 2, Block 53, University Lands
1150' FSL & 467' FEL - Gr. Elev. 2539'
Field: Cal South (Ellenburger) - TD 8000'
Schleicher County, Texas
Contractor:

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9-8-84 Spudded at 7:30 a.m. on 9-7-84. Drlg at 950 in surface. Made 950 in 22 hours. 1/4 degree at 515. 3/4 degree at 1029. BW 40,000. RPM 100. Mud type FW. DWC \$35,337.30.

9-9-84 Drlg at 1335 in surface. Made 385 in 5 1/2 hours. 3/4 degree at 1029. BW 30,000. RPM 70. Mud type FW. MW 8.4, PH 7, chlorides 600. Ran 33 jts 8 5/8 24# csg at 1304.37 set at 1317.37 KB. Ran a Texas Pattern notched guide shoe, insert flapper float, ran 7 centralizers, 1 on 1st jt, rest every other 4th collar & ran a cmt basket 100 FS. Western Co. cmt'd with 450 sks Class C 4% gel, 2% cc and 200 sks Class C, 2% cc. PD at 6:30 p.m. Plug held. Top job with 120 sks. DWC \$27,830.35, AWC \$63,167.65.

9-10-84 DRLG at 2407 in sh. Made 1072 in 20 hours. 3/4 degree at 1500. 1/2 degree at 2002. BW 35,000. RPM 75. Mud type FW. DWC \$10,031.50, AWC \$73,199.15.

9-11-84 Drlg at 3750 in sh. Made 1343 in 22 hours. 3/4 degree at 2501. 1 1/4 degree at 3000. 1 1/4 degree at 3250. BW 40,000. RPM 75. Mud type FW. MW 8.4, Vis 28, PH 11, chlorides 800. DWC \$12,192.05, AWC \$85,391.20.

9-12-84 Drlg at 4390 in sh. Made 640 in 15 1/2 hours. 1 degree at 4000. 1 3/4 degree at 4281. BW 40,000. RPM 75. Mud type FW. MW 8.5, Vis 28, PH 11, chlorides 1000. DWC \$5,998.00, AWC \$91,389.20.

9-13-84 Drlg at 5250 in sh. Made 860 in 22 1/4 hours. 3/4 degree at 4541. 1 1/4 degree at 4991. BW 40,000. RPM 75. Mud type FW. DWC \$7,938.00, AWC \$99,327.20.

9-14-84 Drlg at 6250 in sh & li. Made 1000 in 22 3/4 hours. 1 degree at 5272. 3/4 degree at 5770. Mud type FW. MW 8.4, Vis 28, PH 10, chlorides 1000. DWC \$9,493.00, AWC \$108,820.00.

9-15-84 Drlg at 6641 in sh. Pres. Oper. Trip for hole in pipe. Made 391 in 11 1/4 hours. 2 degrees at 6268. 1 1/4 degree at 6517. BW 42,000. RPM 75. Mud type FWG. MW 8.4, Vis 28, PH 10, chlorides 1000. DWC \$3,983.81, AWC \$112,804.01.

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- 9-16-84 Drlg at 6980 in sh and li. Made 339 in 19 3/4 hours. BW 45,000. RPM 75. Mud type FW. MW 8.8, Vis 34, PH 11, WL 18, solids 3.5%, chlorides 1200. DWC \$5,154.50, AWC \$117,958.51.
- 9-17-84 Drlg at 7338 in sh and sn. Made 358 in 23 hours. 1/4 degree at 7017. BW 45,000. RPM 75. Mud type FWG. MW 9.2, Vis 45, PH 10, WL 9, solids 6%, chlorides 15,000. Drlg break: 7044-7072 from 4' 1/2 min/ft to 1-1 1/2 min/ft with 285 units of gas. DWC \$4,576.00, AWC \$122,534.51.
- 9-18-84 Drlg at 7638 in sh. Made 300 in 28 1/4 hours. 3/4 degree at 7518. BW 45,000. RPM 75. Mud type FWG. MW 9.2, Vis 39, PH 10, WL 9, solids 7%, chlorides 1800. Drlg breaks: 7110-18 from 4 1/2-5 min/ft to 1 1/2 min/ft with 68 units of gas. 7126-34 from 3 1/2 min/ft to 1 1/2-2 min/ft with 112 units of gas. 7332-46 from 5 min/ft to 1 1/2-2 min/ft with 160 units of gas. DWC \$3,094.00, AWC \$125,628.51.
- 9-19-84 Drlg at 7912 in sh. Pres. Oper. Trip for bit. Made 274 in 19 3/4 hours. BW 45,000. RPM 75. Mud type FWG. MW 9.3, Vis 60, PH 11, WL 9, solids 7%, chlorldies 2000. Believe to be on top of Ellenburger. DWC \$5,697.00, AWC \$131,325.51.
- 9-20-84 TD 7990. Pres. Oper. Logging. Made 78 in 5 1/2 hours. Mud type FWG. MW 9.4, Vis 65, PH 11, WL 9, solids 7%, chlorides 1200. TD at 8:30 p.m. on 9-19-84. Logger TD 8003. DWC \$1,671.00, AWC \$132,996.51.
- 9-21-84 TD 7990. Pres. Oper. running csg. Loggers TD 8002. Logging intervals Dual Induction from TD to surface csg. Density Neutron from TD to 6830 and 2350 to 1300. DWC \$18,944.67, AWC \$151,941.18.
- 9-22-84 TD 7990. Pres. Oper. Released rig at 2:00 p.m. on 9-21-84. Ran 191 jts 4 1/2 csg at 7976.10 set at 7989.10 KB. Ran 15 centralizers, one on first jt then one on every other collar. Ran a float shoe and float collar. Western cmt'd with 600 sks 50-50 poz, Class C, 2% gel, 6# salt, .5% TF-75. .2% AF-40. PD at 10:00 p.m. Plug held. DWC \$43,833.30, AWC \$195,774.48.
- 9-27-84 RU American Well Service. Will perf and acidize today.
- 9-28-84 RU Dresser Atlas. Ran PFC correlation log. Perfed from 7834-40 with 2 spf, 13 holes. TIH with

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Cont'd tubing. Spotted 1 bbl acid over perfs. Pulled 3 jts tubing leaving 238 jts of 2 3/8 tubing set at 7746.10 KB. Western acidized with 1500 gal 15% NEFE HCL with 1.5 gpt LT-22, 5 gpt XR-2L, 3 gpt AC-2, 1 gpt I-15, 1 gpt Claymaster 3. Formation broke down at 3800 psi. Avg press 3200. Avg rate 2.0 bpm. Balled out at 4000 psi. ISIP 2800, 5 min 2600, 10 min 2300, 15 min 2100. 151 BLWTR. RU to swab. FL on 1st run at surface. FL on last run 2500 FS. Started showing 2% oil and a small gas blow after 5th run. Last run showed 10% oil. Made 11 swab runs and recovered 2 BO and 94 BW. 57 BLWTR. This a.m. TP 500, CP 360. RD American pulling unit. RU Creek swab unit.

9-29-84 TP 500, CP 350. Opened on an 18/64 choke and blew down in 15 min. Made 2 runs and well kicked off and flowed for 45 min. Unloaded 8 BO and 20 BW. FL on 1st run 2800 FS. FL on last run 4900 FS. TP gassing, CP 350 at end of day. Made 18 swab runs. Recovered 23 BO and 60 BW. 3 BWOL. This a.m. TP 525, CP 700. Opened on an 18/64 choke.

9-30-84 TP 525, CP 700. Opened on an 18/64 choke and flowed 1 hr and unloaded 15 bbls, 80% oil. Made 4 swab runs and dried well up. Started hourly runs with fluid entry 350 per hr. FL on 1st run 2900 FS. FL on last run 7500 FS. Well was gassing 10-15 min after each run. Made 10 swab runs. Recovered 33 BO and 14 BW. 17 BWOL. This a.m. TP 300, CP 575. SI until Monday.

10-1-84 SD swab unit Sunday. This a.m. TP 475, CP 725. Opened on an 18/64 choke and flowed for 1 1/2 hours. Unloaded 15 BO and 5 BW. FL on 1st run 4700. Made 4 runs. Well kicked off with TP 100, CP 460. Flowed 1 hr, unloaded 4 bbls. Started swabbing. Made a total of 11 runs. Fluid entry was 300/hr. Recovered 45 BO and 19 BW. 36 BWOL. TP 20, CP 135 at end of day. Last sample showed 75% oil.

10-3-84 SI TP 350, CP 450. WO frac.

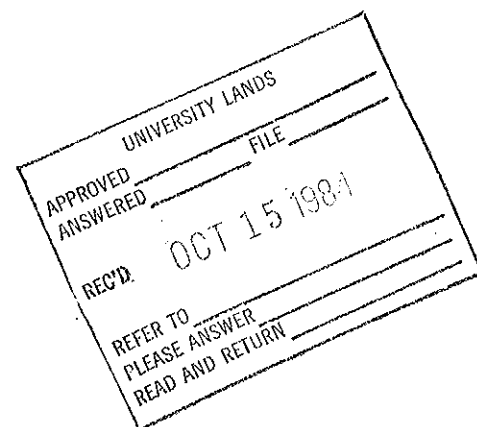
10-4-84 SI TP 500, CP 620. WO orders.

10-5-84 SI TP 600, CP 700.

10-6-84 SI TP 660, CP 780.

10-7-84 SI TP 740, CP 860.

10-8-84 SI TP 780, CP 900.



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10-9-84 SI TP 980, CP 900.

10-10-84 SI TP 820, CP 920.

10-11-84 SI TP 830, CP 940.

10-12-84 SI TP 860, CP 940.

10-13-84 SI TP 880, CP 950.

10-14-84 SI TP 880, CP 950.

10-15-84 SI TP 900, CP 980.

10-16-84 SI TP 880, CP 1000.

10-17-84 SI TP 880, CP 1020. WO frac.

10-18-84 SI TP 910, CP 1060.

10-19-84 TP 920, CP 1075. Will come up the hole this a.m.

10-20-84 RU American Well Service. RU Tom Thorpe kill truck. Kill well w/ 31 bbls 2% KCL water down annulus, 11 bbls down tubing. TOOH with tbg. RU Dresser Atlas & ran correlation log. Set CIBP @ 7500 KB + 20 cmt. Ran PFC & perfed from 7056-78 w/1 spf, 23 holes. TIH w/217 jts of 2 3/8 tbg to 7078 KB. Will acidize this a.m.

10-21-84 Western spotted 1 bbl acid w/ 217 jts of 2 3/8 tbg @ 7078 KB. Pulled 3 jts to acidize w/2000 gal 7 1/2% NEFE, 2 gpt W-27, 2 gpt F75N, 2 gpt L53W, 1 gpt A-200, 5 gpt L58 & 46 balls. Left 214 jts set @ 6980.41 KB. BDP 1200. Avg press 2600. Max press 4100. Avg rate 4 bpm. ISIP 3200, 5 min 400, 10 min 200, 15 min 100. Good ball action. Did not ball out. 147 BLWLTR. Swab report: FL on 1st run 800 FS w/100% water. Made total of 21 runs. FL on last run 3000 FS & scattered. Last 3 runs w/10% oil & 90% water, gassing. Rec 84 BLW. 63 BLWLTR. This a.m. TP 270, CP 275.

10-22-84 TP 270, CP 275. Bled off in 15 min, open choke. Made total of 16 runs. FL on 1st run 1500 FS w/40% oil. FL on last run 6500 FS w/90% oil. Rec 20 BO & 53 BW. 10 BLWLTR. TP 0, CP 60 @ end of day. This a.m. TP 300, CP 350. FL on 1st run 4000 FS w/100% oil.

10-23-84 TP 300, CP 350. Made total of 6 runs. FL on 1st run 1500 FS w/40% oil. FL on last run 5500 FS. Rec 21 BO and 5 BW. 5 BLWLTR. This a.m. TP 480,

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Cont'd CP 500. FL at 1000 FS with 100% oil.

10-23-84 TP 300, CP 350. Made total of 6 runs. FL on 1st run 1500 FS with 40% oil. FL on last run 5500 FS. Recovered 21 BO and 5 BW. 5 BLWLTR. This a.m. TP 480, CP 500. FL at 1000 FS with 100% oil.

10-24-84 TP 480, CP 500. Made 1 swab run. FL 1000 FS with 100% oil. Recovered 4 BO. Shut in well. Released unit. 5 BLWLTR.

10-25-84 SI. 5 BLWLTR.

10-26-84 SI. 5 BLWLTR.

10-27-84 SI. 5 BLWLTR.

10-28-84 SI. 5 BLWLTR.

10-29-84 SI. 5 BLWLTR. Waiting on frac.

10-30-84 SI. 5 BLWLTR.

10-31-84 Frac this a.m. with 50,000 gals 50# gelled 2% KCL with 400 scf N2/bbl.

11-1-84 RU Western & frac'd well w/50,000 gals 50# gelled 2% KCL, 400 SCF N-2/bbl & 65,860# 20/40 sand. Frac procedure as follows:

<u>Stage</u>	<u>Gals Pumped</u>	<u>lb/gal 20/40</u>
PAD	1,100	---
1st	5,820	1
2nd	6,660	2
3rd	6,660	3
4th	6,660	4

ISIP 3500, 15 min 3000. Max press 4800. Aver press 4700. Max rate 21.5 bpm. AIR 20 bpm. 981 BLWLTR. Flowback: 1:45 p.m. TP 1925, CP 1900 on 23/64". 2 p.m. TP 800, CP 1750, unloading frac fluid. 2:45 TP 300, CP 1500, cut back to 20/64". 3:15 TP 190, CP 1390, increased to 32/64". 3:30 TP 130, CP 1300. 6 p.m. TP 0, CP 1490. SI. Rec'd 241 BW. 740 BLWLTR. Will get a swab rig this a.m.

11-2-84 SI TP 10, CP 1470. RU Frontier swab unit. FL on 1st run 1000' FS w/40% oil. Made 4 runs. FL on last run 800' FS & scattered. Recovered total of 40 BO & 146 BW. 594 BLWLTR. Well flowing 30 min to 1 hour after each run. Flowed 2 hours after 4th run. Died & SIFN. TP 0, CP 940.