

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/16/81 FIRST REPORT. Staked location SW NW Sec. 9-
T12S-R2W, Linn County, Oregon. Graded Ground Elev.
329', Rig KB 10.50', RKB 340.10. Drove 130' 14"
conductor thru river fill, cmt w/7 yds Ready-Mix,
now move in Graham Rig #1.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/17/81 MIRT.
1/18/81 MI & RURT & prep to spud.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/19/81 1 day. Drlg sd & sh @ 440'. Drld 300' in
10 hrs. MW 9.2; vis 48; WL 9; pH 8.5. Ran Bit #1A,
(12½" Re-tip OSC3J) in @ 140', bit has drld 300' in
10 hrs. BGG: 100 unit increase @ 200' declined
immediately. Spudded well @ 8:00 pm 1/18/81. Drlg wt
10M#, RPM 120.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/20/81 2 days. TD 531'. Drld 91' of sh in 3½ hrs.
RU Welex, prep to run logs. MW 9.2; vis 42; WL 9.2;
pH 8. Pld Re-tip #1 @ 531', bit drld 391' in 13½ hrs.
Dull grade: 3-2-1. WO Welex 20-3/4 hrs. Now PU to log.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/21/81 3 days. TD 531'. NU BOP's. MW 9.2; vis 45;
pH 9. RU Welex, ran Dual-Induction log, Compensated
Acoustics Velocity, & Compensated Density Neutron from
531-130'. RU & ran 18 jts. 9-5/8" 36# K55 STC - 525.37'
set @ 521.37'. Cmt'd w/300 sx Class G + 2" CaCl₂. PD @
5:00 pm 1/20/81. No cmt returns to surf. Ran 4 jts. 1" - 86', cmt'd w/50 sx
Class G + 2" CaCl₂. WOC 12 hrs. Now prep to NU BOPE.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/22/81 4 days. Drlg ss @ 945'. Drld 414' in 10½ hrs.
MW 9.3; vis 43; WL 7; pH 10.5. NU BOP's, test BOP's,
Hydrill, manifold & stand pipe to 1000 psi. TIH w/bit
#2 (8-3/4" Smith DTJ, s/n OV6276) tagged cmt @ 484',
drld cmt, float & shoe. Drlg wt 12M#; RPM 100.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/23/81 5 days. Drlg ss @ 1625', drld 680' in 21 hrs.
MW 9.6; vis 50; WL 5.4; pH 10. Pld bit #2 @ 994', bit
473' in 12½ hrs. Ran bit #3 (8-3/4" Smith DTJ, s/n AX
6275) Bit has drld 631' in 18½ hrs. Trip. gas @ 994'-
345 units. 20 units BGG incr from 1538-1540', 60 units
BGG incr from 1543-1545'. Drlg wt 12M#; RPM 100.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp.

1/24/81 6 days. Rep rig @ 1866', drld 241' of volcanic
tuff & ss in 13 hrs. MW 9.7; vis 47; WL 5.8; pH 10. Pld
bit #3 @ 1821', bit drld 827' in 25½ hrs. Dull grade:
8-4-1. Ran bit #4 (8-3/4" Smith DTJ, s/n DH7439) in @
1821'. Bit has drld 45' in 6 hrs. Drive shaft parted
on DW, now rep rig.

1/25/81 7 days. POH for bit @ 1939'. Drld 73' of tuff,
basalt, pyr, qtz & shells in 9½ hrs. MW 10.6; vis 47; WL 5.2; pH 9.5. Pld bit
#4 @ 1866', bit drld 45' in 6 hrs. Dull grade: 4-4-1. Ran bit #5 (8-3/4" Smith
BTJ, s/n BT0816) in @ 1866', out @ 1939'. Bit drld 73' in 9½ hrs. Now POH.

- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/26/81 8 days. Drlg silt & v. volcanics @ 2030', drld 91' in 13-3/4 hrs. MW 11.9; vis 65; WL 5.8; pH 9.5. Fin TIH w/bit #6 (8-3/4" Smith F2, s/n BT1685) in @ 1939', bit has drld 91' in 13-3/4 hrs. Raised MW to 11.9 to control sluffing shale. Drlg wt 15M#; RPM 60.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/27/81 9 days. Drlg volcanics @ 2162', drld 132' in 23 1/2 hrs. MW 12; vis 70; WL 6; pH 9.5. Bit #6 has drld 223' in 37 1/2 hrs. Prep to run intermediate logs, will run 7" csg. Drlg wt 20M#; RPM 60.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/28/81 10 days. TD 2162', logging. MW 12; vis 70; WL 5.4; pH 9.5. Pld bit #6 @ 2162' for electric logs, bit drld 223' in 37 1/2 hrs. Dull grade: 4-4-I. POH, WO Welex, RU, ran DIL, Compensated Acoustic Velocity, Compensated Density Neutron from 2161-521', now rng Dipmeter.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/29/81 11 days. TD 2162', NU BOPE on 7" csg. Fin logging w/Welex, TIH, circ 1 1/2 hrs, TOH, LD 6" DC's, RU csg tools, ran 55 jts 7" 20# K55 STC csg, ran guide shoe & insert float, total length 2118.70' set @ 2116' KB. FC @ 2076.37', cmt as follows: Ran 440 sx class G, 2% CaCl₂, no returns, PD @ 6:30 pm, had circ thruout job, set slips, ND BOP's, cut off csg, now NU BOPE.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/30/81 12 days. Drlg Basalt @ 2231', drld 69' in 5 hrs. MW 9.4; vis 42; WL 6; pH 11. Fin NU BOPE, tested manifold & BOP to 1M psi, tested annulus to 1M psi, PU bit #7 (6 1/4" Smith DTJ, s/n AX 9162) tagged top of cmt @ 1709', drld cmt, FS & 5" of factured Basalt in 1 hr. Pld @ 2167'. Dull grade: 5-5-I. Ran RR#8 (6 1/4" Smith F3) in @ 2167', bit has drld 64' in 4 hrs. Drlg wt 20M#; RPM 50.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 1/31/81 13 days. Drlg ss, silt & cly @ 2535', drld 304' in 17-3/4 hrs. MW 10.2; vis 58; WL 6; pH 10.5. Bit #8 has drld 368' in 22 1/2 hrs. BGG: 22 unit @ 2260', gas BG has been fluctuating. Drlg wt 12M#; RPM 20.
2/1/81 14 days. TOH for bit @ 2963', drld 428' in 22-3/4 hrs. MW 10.1; vis 65; WL 5; pH 10. Survey: 2° @ 2809'. Fin POH w/bit #8. Dull grade: 8-8-I. Ran bit #9 (6 1/4" Smith DTJ, s/n AX 8976) in @ 2963'. Now TIH. Had several gas shows thruout section. BGG: 125 units.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/2/81 15 days. Tripping for bit @ 3310', drld 374' of ss, sd & cly in 15-3/4 hrs. MW 10.1; vis 65; WL 4; pH 9.5. Survey: 1-3/4° @ 3305'. Ran bit #9 (6 1/4" Smith DTJ, s/n AX 8976) in @ 2963', bit has drld 374' in 15-3/4 hrs. Have had several BG increases; maximum 160 units in last 24 hrs. Drlg wt 18M#; RPM 90.
- HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/3/81 16 days. TD 3623', drld 313' of ss, sd w/ occasional cal bones. Fin plg bit #9 @ 3312', bit drld 349' in 15-3/4 hrs. Dull grade: 8-8-I. Ran bit #10 (6 1/4" Smith DTJ, s/n AX 9012) in @ 3312' out @ 3623', bit has drld 311' in 16 1/2 hrs. Now circ for samples, prep to pull bit.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/4/81 17 days. Drlg silt, cly & sd @ 3798', drld 175' in 7½ hrs. MW 10.9; vis 73; WL 4; pH 11. Pld bit #10 @ 3643', bit drld 331' in 16½ hrs. Dull grade: 6-6-I. Ran bit #11 (6½" Smith DTJ, s/n AJ6188) in @ 3643', bit has drld 155' in 7½ hrs. Max trip gas 370 units @ 3643'. BGG: 20-40 units; drlg wt 20M#; RPM 90.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/5/81 18 days. Drlg ss, silt & cly @ 3960', drld 162' in 11-¾ hrs. MW 12.2; vis 65; WL 4; pH 9.5. Survey: 3¼° @ 3798'. Pld bit #11 @ 3955', bit 312' in 17½ hrs. Dull grade: 6-4-I. Ran bit #12 (6½" Smith DTJ, s/n BN3013) in @ 3955', bit has drld 5' in 1½ hrs. BGG 75 units. 300 units connection gas. High connection gas caused by swelling hole while making connection in sticky clay. Drlg wt 20M#; RPM 120.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/6/81 19 days. TD 4030', drld 70' of cly, silt, volcanic tuff & sd. MW 12.4; vis 45; WL 4; pH 9.5. Bit #12 was pld @ 4030', bit drld 75' in 8½ hrs. Dull grade: 6-4-I. Logging w/Welex, have run DIL guard & Density Neutron from 4030-2116'. Now rng Sonic, had numerous background increases, up to 200 units. Now logging w/Welex.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/7/81 20 days. Drlg @ 4076', drld 46' of Marine cly & silt in 7½ hrs. Ran Sonic & Dipmeter from 4030-2116', TIH w/bit #13 (6½" Reed FP62, s/n 128177) Pld bit #13 @ 4053', bit drld 23' in 5½ hrs. Dull grade: 1-1-1/8". Ran bit #14 (6½" Smith DGJ, s/n A7483) Bit has drld 23' in 2 hrs. Drlg wt 10M#; RPM 120.

2/8/81 21 days. Drlg @ 4317', drld 241' of cly & sh in 19 hrs. Pld bit #14 @ 4290', bit drld 237' in 17½ hrs. Dull grade: 6-8-¼". Ran bit #15 (6½" Smith DTJ, s/n AV8845) bit has drld 27' in 3 hrs. BGG 10-50 units. Trip Gas 1200 units @ 4290'. Drlg wt 15M#; RPM 90.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/9/81 22 days. Drlg @ 4525', drld 208' cly & silt in 18½ hrs. MW 12.8; vis 55; WL 4.8; pH 9.5. Pld bit #15 @ 4493', bit drld 203' in 18 hrs. Dull grade: 4-7-¼". Ran bit #16 (6½" Smith DTJ, s/n AX9236) Bit has drld 32' in 3½ hrs. Survey: 4° @ 4493'. BGG 20 units; trip gas 200 units. Drlg wt 20M#; RPM 90.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/10/81 23 days. Logging @ 4692', drld 167' of cly & silt in 14 hrs. MW 12.8; vis 48; WL 4.4; pH 9.5. Pld bit #16 @ 4692', bit drld 199' in 17½ hrs. Dull grade: 4-8-¼". RU Wellex, ran Dual Induction Guard log & Sonic from 4296-3800'. Now rng Density.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/11/81 24 days. TD 4692', circ. MW 12.8; vis 48; WL 4.4; pH 9.5. Fin rng Density from 9692-3900', ran velocity surveys, ran Dipmeter from 4692-3900', made 3 runs w/Sidewall sample gun, completed 2 runs, rec 16 cores, stuck tool @ 3120' while POH on 3rd run, pull off tool, TIH & push gun to btm. Now circ & cond.

HICKEY 9-12
(4700' Fisher-WC)
Linn Co., Oregon
Lebanon Prosp. 2/12/81 25 days. TD 4692', att. to shoot sidewall cores. MW 12.8; vis 48; WL 4.4; pH 9.5. Circ, TOH, RU Wellex, RIH w/sidewall sample gun, could not get tools to fire, now WO Wellex to rep tools.

HICKEY 9-12
 AMERICAN QUASAR
 SW NW SEC. 9, T12S-R2W
 Linn County, OR Contr: Paul Graham #1
 Graded Ground Elev 329'

HICKEY 9-12 2/14/81 27 days. Turned operations over to production
 (4700' Fisher-WC) dept. DROPPED FROM DRILLING REPORT.
 Linn Co., Oregon
 Lebanon Prosp.

HICKEY 9-12 2/14/81 - PBDT 4630'. ND BOP's, NU wellhead & BOP's. Test
 Linn County, OR to 2000 psi, OK. PU & RIH w/ 2 3/8" 4.7# N-80 AB DSS tbg.
 Tag cement @4630'. Circ hole 1 hr.
 2/15/81 - POH w/tbg. RU GO wireline & run GR-CCL-CBL log from
 4631'-2100'. LD excess tbg, Make up pkr. RIH on tbg. Set Baker model R @3000'. ND
 BOP's, NU tree. Swab well down to 2300'. RU GO to perf.
 2/16/81 - PBDT 4630'. RU GO, perf 4 SPF w/1 9/16" thru tbg
 gun from 3095-3100'. 25 psi on tbg after perf'ing. Open well to pit, rec 2 bbls KCl
 wtr. Flow 5 hrs, at est 50-70 mcf/d rate, on 3/4" ck, 0 psi FTP. CWI 4 PM, 2/15/81.
 SI WH. Pressures @5 PM, 1120 psi, 6 PM 1180, 7 PM 1200, 6 AM 2/16/81, 1200 psi.

HICKEY 9-12 2/17/81 - PBDT 4630'. WO Halliburton til 2 PM. SITP 1230 psi.
 Linn County, OR RU to acdz. Acdz perf's 3095-3100 w/500 gals HCl w/corrosion
 inhibitor. As soon as tbg was loaded, pump press incrsd to
 1500 psi, incrsd to 3000 psi w/rate @ 1/4 BPM. Press broke to 1600 psi. Displ w/2% KCl
 wtr. ISIP 1000 psi, 5 min 1000 psi. Open well to pit, flowed to 0, 2 min. RU to swab,
 make 3 swab runs, well kicked off. Flowed well to pit 7 hr, rec 24 BLW, 65 bbls forma
 wtr. SWI 12:30 AM, 2/17/81. SIP: 1 AM 700 psi, 2 AM 1160, 3 AM 1220, 6 AM 1220.

HICKEY 9-12 2/18/81 - PBDT 3075, blew well down. SITP 1200. Loaded hole
 Linn County, OR w/2% KCl mixed 85 bbls 10 ppg mud. Loaded tbg w/10 ppg mud.
 Well dead. ND tree, NU BOP. Released pkr & circ hole w/mud.
 POH. LD Baker Model R pkr. PU Halliburton RTTS pkr, WIH. Set pkr @3000'. Squeezed
 w/100 sx Class G containing 2% CaCl₂. Staged last 2 bbls, obtained squeeze of 2000
 psi. Relsd pkr, reverse out. Pull 1 std. WOC 6 hrs, POH, RU GO Wireline & perf
 2974-75 w/4 shots. PU RTTS. WIH, prep to squeeze. Gas analysis :

Gas	Mole%	Gas	Mole%
N ₂	8.158	nC ₄	.006
CH	91.311	iC ₅	.005
CO ₂	.005	nC ₅	.001
C ₂	.499	BT ₂	935.5
C ₃	0	G	.592
iC ₄	.014	MW	17.1

HICKEY 9-12 2/19/81 - PBDT 2963, RU Halliburton and squeezed
 Linn County, OR perforation 2974-75 with 100 sx Class G with 2%
 CaCl₂. Open bypass on packer and spot cement.
 Closed bypass, pumped in at 1300 psi staged last 2 barrels and obtained
 squeeze to 2000 psi. Released packer, pulled 2 stands of tubing, reverse
 out WOC 3 hrs. POH laid down packer and PU bit and drill collars WIH to
 2800', WOC 7 hrs. tagged cement at 2732 at 10 P.M. Cement soft and washed
 out, WOC 2 hrs. cement still soft WOC 3 hrs.

*no tag
of plug.*

MAY 18 1981

DEPT OF GEOLOGY
BAMNONGAMERICAN QUASAR

SW NW SEC. 9, T12S-R2W

Linn County, OR Contr: Paul Graham #1

Graded Ground Elev 329'

HICKEY 9-12

Linn County, OR

2/20/81 - RIH w/bit, clean out cement to 3075', circ hole clean. POH, LD drlg Assy. TIH w/Baker model R pkr. Set pkr @ approx. 2900'. ND BOP's, NU tree. Swab well down to 2200'.

HICKEY 9-12

Linn County, OR

2/21/81 - PBDT 3075 - RU GO wireline - perforate 4 spf - 3004 - 3012 w/1 9/16" thru tbg gun. RD GO - had 15 psi on tbg after perf'ing open well, swab down to 2900' - rec 2 bbls water - well flowing at an estimated 10-15 MCFD - load tbg w/2% KCl water - Pressure up to 3000 psi, formation broke, pumped 2 bbls water @ 1 BPM rate @ 2700 psi, ISIP 1600 psi, 5 min. - 1300 psi - Open well, bled to 0 psi in 1 min. Swab down to 2900', rec 12 bbls water, well flowing at estimated 10-20 MCFD. Close well in and record surface build-up @ 3:00 p.m. 0 psi, 4:00 - 80 psi, 5:00 - 275 psi, 6:00 - 540 psi, 7:00 - 920 psi, 8:00 - 1200 psi, 6:00 a.m. 2/22/81 1200 psi.

2/22/81 - PBDT 3075. Open well @ 6:00 a.m. on 1/8" choke pressure bled from 1200 to 0 in 20 min., RU to Swab, tbg dry, close well in, prep to move rig off. Will evaluate sidewall samples before attempting stimulation. Operations suspended until evaluation is complete. Release rig.

HICKEY 9-12

Linn County, OR

3/3/81 - RU Halliburton. Acidz perf 3004-3012 w/1000 gals 12-3 mud acid. Flush w/7 bbl 2% KCl wtr w/750 SCF/bbl Nitrogen in acid & flush. SITP 1200 psi. Pumping @ 1/2 BPM, press decrsd to 600 psi, then incrsd to 1600 psi when adic reached perms. Press gradually incrsd to 2800 psi w/1/2 of acid displaced, then dropped to 2600 psi for remainder of job. ISIP 2400 psi, 10 min 2100. Opened well to pit, press dropped to 0 in 8 min. Rec 7 bbls KCl flush. Well died. Well had slight blow for 4 hr. Gas would burn. CWI 5 PM, 24 BLTR.

HICKEY 9-12

Linn County, OR

3/5/81 - SITP 1000 psi, bled to 0 w/o making any fluid. SWI. RU coiled tbg unit to blow fluid from well.

HICKEY 9-12

Linn County, OR

3/6/81 - WO Nowsco coil tbg unit, not already rigged up as previously reported.

HICKEY 9-12

Linn County, OR

3/7/81 - RU Nowsco. Circ to btm. Rec approx 22 BF. Circ from btm w/200,000 SCF Nitrogen per hr. Making about 5 gals fluid per hr. SWI 2 hrs, No fluid entry. Well producing at estimated rate of 50 MCFPD. Load has been recovered. RD & release Nowsco.

HICKEY 9-12

Linn County, OR

3/9/81 - MIRU Gerhardt Wireline. Perf addn'l interval 3012-3027 w/thru tbg gun, 4 SPF. RD perforator w/tbg dry. Open well wide open & flow 45 min. Not mkg any fluid. Choked down to 1/4" ck setting on adjustable ck. After 4 hrs, FTP 120 psi. Est rate 200 MCFD. SWI. Will attempt to get more accurate gas msmt.

HICKEY 9-12

Linn County, OR

3/10/81 - Drop from report until further activity.

HICKEY 9-12

Linn County, OR

DOGAMI
PRESENT
3/17/80 - SITP 1225 psi. Flowed well 2 hrs, rate 170 MCFPD. FTP 186 psi. Gas samples were taken for analysis. Test was witnessed by Northwest Natural Gas. Drop from report until further activity.