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.

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1/17/81  MIRT.
1/18/81  M1 & RURT & prep to spud.

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1/19/81  1 day.  Drlg sd 8 sh @ 440'.  Drld 300' in
10 hrs.  MW 9.2; vis 48; WL 9; pH 8.5.  Ran Bit #1A,
(12") 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.

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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.  WC Welex 20-3/4 hrs.  Now PU to log.

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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 log from
531-130'.  RU & ran 16 jts.  9-5/8" 36+ KS6 STC - 525.37'
set @ 521.37'.  Cmt'd w/300 sx Class G + 2 CaCl2; PD 3
5:00 pm 1/20/81.  No cmt returns to surf.  Ran 4 jts.  T# - 86',
cmt'd w/50 sx
Class G + 2 CaCl2.  WOC 12 hrs.  Now prep to NU BOP.
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/26/81 8 days. Drlg silt & silt clays @ 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.

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1/27/81 9 days. Drlg volcanics @ 2162', drld 132' in 23½ hrs. MW 12; vis 70; WL 6; pH 9.5. Bit #6 has drld 223' in 37½ hrs. Prep to run intermediate logs, will run 7" csg. Drlg wt 20M#; RPM 60.

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1/28/81 10 days. TD 2162', logging. MW 12; vis 70; WL 5.4; pH 9.5. Plld bit #6 @ 2162' for electric logs, bit drld 223' in 37½ hrs. Dull grade: 4-4-1. POH, WO Welex, RU, ran Dil, Compensated Acoustic Velocity, Compensated Density Neutron from 2161-521', now run Dipmter.

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1/29/81 11 days. TD 2162', NU BOPE on 7" csg. Fin logging w/Welex, TIH, circ 1½ hrs, TOH, LD 6" DC's, RU csg tools, ran 55 jts 7" 20# KE5 STC csg, ran guide shoe & insert float, total length 2'10.70' set @ 2116' KB. FC @ 2076.37', cmt as follows: Ran 440 sx class 6, 2% CaCl₂, no returns, PD @ 6:30 pm, had circ thruout job, set slips, NU BOPE's, cut off csg, now NU BOPE.

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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 & BOPE to 1M psi, tested annulus to 1M psi. Pli bit #7 (6¼" Smith DTJ, s/n AX 9162) tagged top of cmt @ 1709', drld cmt, FS & ½" of factured Basalt in 1 hr. Pld @ 2167'.

Dull grade: 5-5-1. Ran RR#8 (6¼" Smith F3) in @ 2167', bit has drld 64' in 4 hrs. Drlg wt 20M#: RPM 50.

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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 22½ hrs. BGC: 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: 8-8-1. Ran bit #9 (6¼" Smith DTJ, s/n AX 8976) in @ 2963'. Now TIH. Had several gas shows thruout section. BGC: 125 units.

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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 (6¼" 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.

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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: 8-8-1. Ran bit #10 (6¼" Smith DTJ, s/n AX 9012) in @ 3312' out @ 3623', bit has drld 311' in 16½ hrs. Now circ for samples, prep to pull bit.
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2/4/81 17 days. Drll silt, cly & sd @ 3798', drld 175' in 7½ hrs. MW 10.9; vis 73; WL 4; pH 11. Plb bit #10 @ 3643', bit drld 331' in 16½ hrs. Dull grade: 6-6-2. Ran bit #11 (64° Smith DTJ, s/n AJ6188) in @ 3643', bit has drld 155' in 7½ hrs. Max trip gas 370 units @ 3643'. BGG: 20-40 units; drll wt 20M#/RPM 90.

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2/5/81 18 days. Drll ss, silt & cly @ 3960', drld 162' in 11-3/4 hrs. MW 12.2; vis 65; WL 4; pH 9.5. Survey: 33° @ 3798'. Pld bit #11 @ 3955', bit 312' in 17½ hrs. Dull grade: 6-6-4. Ran bit #12 (64° Smith DTJ, s/n BN3013) in @ 3955', has bit 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. Drll wt 20M#/RPM 120.

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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: 6-4-1. Logging w/Welex, have run DIL guard & Density Neutron from 4030-2116'. Now nng Sonic, had numerous backbore increases, up to 200 units. Now logging w/Welex.

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2/7/81 20 days. Drll @ 4076', drld 46' of Marine cly

8 silt in 7½ hrs. Ran Sonic & Dipmeter from 4030-2116'.

7½ w/bit #13 (64° Reed FPE2, s/n 128177) Plb bit #13

@ 4053', bit drld 23' in 5½ hrs. Dull grade: 1-1-1/8'.

Ren bit #14 (64° Smith DGG, s/n A7463) bit has drld 23' in 2 hrs. Drlg wt 15M#/RPM 120.

2/8/81 21 days. Drll @ 4317', drld 241' of cly & sh

in 19 hrs. Pld bit #14 @ 4250', bit drld 237' in 17½ hrs. Dull grade: 6-8-4½. Ran bit #15 (64° Smith DTC, s/n AV8845) bit has drld 27' in 3 hrs. BGG 10-50 units. Trip Gas 1200 units @ 4290'. Drlg wt 15M#/RPM 90.

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2/9/81 22 days. Drll @ 4525', drld 208' cly & silt in

18½ hrs. MW 12.8; vis 55; WL 4.8; pH 9.5. Plb bit #15

@ 4493', bit drld 203' in 18 hrs. Dull grade: 4-7-1½.

Ren bit #16 (64° 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.

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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. Plb

bit #16 @ 4692', bit drld 199' in 17½ hrs. Dull grade:

4-8-1½. RU helmet, ran Dual Induction Guard log & Sonic

from 4296-3800'. Now nng Density.

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2/11/81 24 days. TD 4692', circ. MW 12.8; vis 40;

WL 4.4; pH 9.5. Fin nng 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.

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2/12/81 25 days. TD 4692', att. to shoot sidewall cores.

MW 12.8; vis 48; WL 4.4; pH 9.5. Circ, TIH, RU Welex, RIH
w/sidewall sample gun, could not get tools to fire, now WO
Welex to ret tools.
HICKEY 9-12  
AMERICAN QUASAR  
SW NW SEC. 9, T12S-R2W  
Linn County, OR Contr: Paul Graham #1  
Graded Ground Elev 329’  

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HICKEY 9-12  
Linn County, OR  
2/14/81 27 days. Turned operations over to production dept. DROPPED FROM DRILLING REPORT.  

2/14/81 - PBTD 4630’. ND BOP’s, NU wellhead & BOP’s. Test to 2000 psi, OK. PU & RIH w/ 2 3/8” 4.7# N-80 AB DSS tbg. Tag cent @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 - PBTD 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/day rate, on 3/4” ck, 0 psi FTP. CWI 4 PM, 2/15/81. SI WH. Pressures 05 PM, 1120 psi, 6 PM 1180, 7 PM 1200, 6 AM 2/16/81, 1200 psi.  

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2/17/81 - PBTD 4630’. WO Halliburton til 2 PM. SITP 1230 psi. RU to acdz. Acdz perf’s 3095-3100 w/500 gals HCl w/corrosion inhibitor. As soon as tbg was loaded, pump press incrds to 1500 psi, incrds to 3000 psi w/rate 04 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.  

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2/18/81 - PBTD 3075, blew well down. SITP 1200. Loaded hole w/2% KCl mixed 85 bbls 10 ppg mud. Loaded tbg w/10 ppg mud. Well dead. NU 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:  

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HICKEY 9-12  
Linn County, OR  
2/19/81 - PBTD 2963, RU Halliburton and squeezed 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.
2/20/81 - RIH w/bit, clean out cement to 3075', circ hole clean.
POH, LD drlgy assy. TTH w/Baker model R pkr. Set pkr @ approx.
2900'. ND BOP's, NNU tree. Swab well down to 2200'.

2/21/81 - PBTD 3075 - RU GO wireline - perforate 4 spf - 3004-
3012 w/ 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 - 10d 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 - PBTD 3075. Open well @ 6:00 a.m. on 1/8" choke pres-
sure bled from 1200 to 0 in 20 min., RU to Swab, tbg dry, close
well in, prep to move rig off. Will evaluate sidebar samples
before attempting stimulation. Operations suspended until eval-
uation is complete. Release rig.

3/3/81 - RU Halliburton. Acdz perf 3004-3012 w/1000 gals 12-3
mud acid. Flush w/7 bbl 2% KCl wrt w/750 SCF/bbl Nitrogen in
acid & flush. SITP 1200 psi. Pumping @ 3 BPM, press decrse to
600 psi, then incrse to 1600 psi when acid reached perfs. Press gradually incrse to
2800 psi w/1/3 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.

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

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

3/7/81 - RU Nowasco. 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 Nowasco.

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 mkig any fluid. Choked
down to 1/8" ck setting on adjustable ck. After 4 hrs, FTP 120 psi. Est rate 200 MCFD.

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

3/17/81 - 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.