

Deviation Survey

<u>Depth</u>	<u>Degree Off Vertical</u>	<u>Depth</u>	<u>Degree Off Vertical</u>
4510'	2-1/4°	6613'	1/4°
4780	2-1/2°	6915'	0°
5093'	2-1/4°	7082'	0°
5644'	1-1/4°	7151'	0°
6370'	1/4°	7440'	0°

Drill Stem Test

DST #1 Wantz Abo 7056'-7151', Tool open 1 hr. 5/8" x 1" choke, No. WC. Tool opened w/weak blow of air. Died in 20 mins. Rec 20' drlg mud w/no shows. SFP 0#, BHFP 45-70#, 30 min SIBHP 90#, GR 3380 in & out. IBHSIP 90#.

Summary

- 9-1-60 Marcum Drilg. Co. rig up rotary.
 9-2-60 Spudded @ 6:00 A.M.
 9-3-60 WOC on 352' of 13-3/8" csg. COB @ 352 w/350 sks Portland cement, circ 30 sks, PD 6:00 A.M. 9-3-60.
 9-7-60 Worth Well ran Caliper to 2894'.
 9-8-60 B. J. cemented 8-5/8" csg. @ 2102' w/1100 sks (1000 sks Incor w/6% gel + 100 sks Incor neat) PD 7:30 A.M. 9-8-60. Circ out 50 sks. WOC.
 9-9-60 Tested 8-5/8" csg. w/1500# for 30 mins. Ok.
 9-11-60 Fish & rec RB cone w/magnetic basket @ 3940' in 7-1/2 hrs.
 9-26-60 7440' TD. Welex ran Gamma Ray, Acoustic, SP, Induction-Electrical, Contact Caliper logs to 7410'.
 9-27-60 Ran 2-1/2" csg. string #1 to 7433' w/Baker Landing ring @ 7402' seating nipple @ 7115' & 45 Baker Rubber Turbalizers. Landed string #1 on east side of tree. Ran 2-1/2" csg. string #2 to 7432' w/45 Baker Rubber Turbalizers, Baker landing ring @ 7401', seating nipple @ 7114'.
 9-28-60 Pulled 6500' of 2-1/2" csg. string #2, respaced Baker Turbalizers for Paddock zone. Re-ran 2-1/2" csg. string #2 to 7432'. Nippled up. Circ. both csg. strings 1-1/2 hrs. Halliburton cemented both 2-1/2" csg. strings @ 7432' & 7433' w/868 sks 6% Incor gel cement. PD @ 5:30 P.M. Circ thru out job. WOC 8-1/2 Hrs. Worth Well Temp. Survey 2-1/2" csg. string #2 to 7312', survey top cement @ 2105'. WOC. Worth Well tagged cement in 2-1/2 csg. string #1 @ 7329' PBTD.
 9-29-60 Marcum Drilg. Co. rig released @ 6:00 A.M. WOC.
 9-30-60 Rig up X-Pert Well Service Pulling Unit. Schlumberger Ran Gamma Ray & Collar logs 4500' to 5600' & 6900' to 7312' in 2-1/2" csg. string #2. Ran Gamma Ray & Collar logs 4500' to 5600' & 6900' to 7324' in 2-1/2" csg. string #1. Halliburton tested 2-1/2" csg. string #1 & 2 w/2000#. OK.
 10-1-60 Schlumberger perf. 2-1/2" csg. string #1, east side of tree, at 7222'-24', 7210'-12', 7197'-09', 7193'-05', 7183'-05', 7163'-05', 7145'-07', 7108'-10', 7103'-08', 7088'-00', 7077'-03', 7064'-06', & 7059'-01' w/2 SPF in the Abo formation. Schlumberger set Bridge plug @ 5479' PBTD in 2-1/2" csg. string #2 & perf 5219'-21', 5175'-00, & 5154'-05' w/2 JSPF in the Paddock formation.
 10-3-60 Cardinal acid Abo perfs 7050'-7224' w/500 gals, TM-8, Non-Emulsion acid,
 Cardinal acid Paddock perfs 5154'-5221' w/500 gals TM-8, Non-Emulsion acid.

