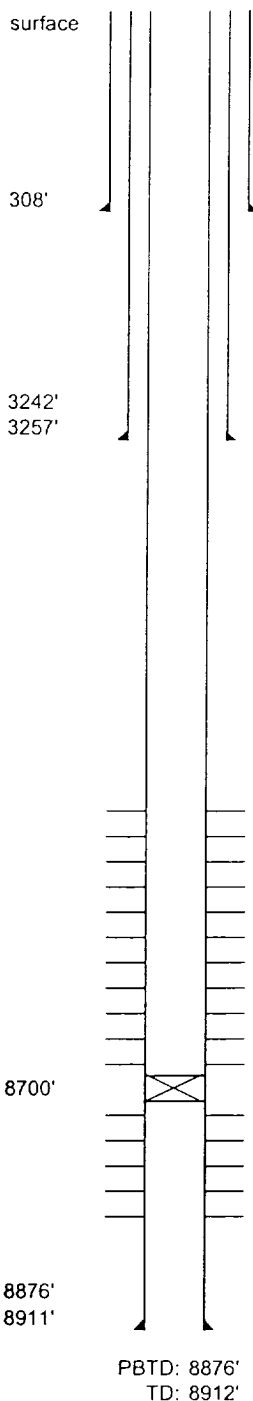


**Phillips Petroleum Company - Southwest Region
Vacuum Abo Unit #13-08**



KB 3961'
DF 3960' Ref
GL 3947'

Surface Hole: 16"
Surface Casing: 13-3/8", 48#, H-40 @ 308'
375 sx. cmt. Circ. 10 sx.

Intermediate Hole: 11"
Intermediate Casing: 8-5/8" @ 3257'
2492' -24#, J-55 & 768'-32#, J-55
1250 sx cmt. TOC unknown.

TOC at 3242' by temperature survey.

Abo Perforations
8579' - 8588' w/ 2 SPF (19 holes)
8590' - 8593' w/ 2 SPF (7 holes)
8596' - 8599' w/ 2 SPF (7 holes)
8610' - 8613' w/ 2 SPF (7 holes)
8615' - 8619' w/ 2 SPF (9 holes)
8625' - 8627' w/ 2 SPF (5 holes)
8629' - 8631' w/ 2 SPF (5 holes)
8633' - 8638' w/ 2 SPF (11 holes)
8646' - 8648' w/ 2 SPF (5 holes)
8652' - 8669' w/ 2 SPF (35 holes)
8678' - 8687' w/ 2 SPF (19 holes)
CIBP at 8700'.
8721' - 8777' w/ 2 SPF (12 holes)
8735' - 8757' w/ 2 SPF (44 holes)
8760' - 8764' w/ 2 SPF (8 holes)
8772' - 8784' w/ 2 SPF (24 holes)
8786' - 8816' w/ 2 SPF (60 holes)

Production Hole: 7-7/8"
Production Casing: 5-1/2" 15.5# & 17#, J-55 @ 8911'
640 sx cmt. TOC at 3242' by temperature survey.

Lease & Well No.: **Vacuum Abo Unit #13-08**
Well Category: One Status: TA'd
Area: New Mexico
Subarea: Buckeye Field: Vacuum Abo Reef
API Number: 30-025-03048
Legal Description: 330' FNL, 990' FWL, Sec 4, T-18-S, R-35-E
Lea County, New Mexico
Spudded: 04/18/1961
Completed: 05/29/1961

Well History:

5/61 Cored Abo 8330-8912'. Perf'd Abo 8721-27', 8735-57', 8760-64', 8772-84', 8786-8816' w/ 2 spf (148 holes). IPF 321 bo, GOR 975, 1 bw / 24 hrs on 18/64" ck w/ 50# ftp on 5/29/61.
10/63 Acdzd 8721-8816' overall w/ 6000 gal 15% HCl. Prod before: 122 bo, GOR 608, 0 bw / 24 hrs w/ 180# ftp on 7/21/63. Prod after: 147 bo, GOR 635, 0 bw / 24 hrs w/ 385# ftp on 10/6/63.
4/69 Acdzd 8721-8816' overall w/ 2500 gal 3% HCl, 5000 gal 28% HCl, 2500 gal 3% HCl. Prod before: Flwd 75 bo, 114 mcfg, 0 bw / 24 hrs. Prod after: Flwd 188 bo, 286 mcfg, 5 bw / 24 hrs on 3/4" ck w/ 150# ftp on 4/13/69.
7/77 Acdzd 8721-8816' overall w/ 5000 gal 28% NE HCl, 3000 gal 3% HCl. Installed pumping equipment. Prod before: Dead. Prod after: Pmpd 84 bo, GOR 676, 1 bw / 24 hrs on 8/16/77.
7/87 Perf'd Abo 8579-88', 8590-93', 8596-99', 8610-13', 8615-19', 8625-27', 8629-31', 8633-38', 8646-48', 8652-69', 8678-87' w/ 2 spf (129 holes). Acdz 8579-8687' overall w/ 5000 gal 15% NEFE HCl. Acid frac'd 8579-8687' overall w/ 3000 gal 15% NEFE HCl and 7500 gal x-linked 15% NEFE HCl in 3 stages. Acdzd 8721-8816' overall w/ 3500 gal 15% NEFE HCl. Prod before: Pmpd 9 bo, 8 mcfg, 19 bw / 24 hrs. Prod after: Pmpd 0 bo, 0.5 mcfg, 135 bw / 24 hrs on 8/6/87.
10/92 Set CIBP at 8500'. Tstd csg to 500 psi for 30 min. Held OK. TA'd 10/22/92.
5/01 Failed bradenhead test when 140 psig pressure was discovered on the intermediate casing. After pressure on casing was relieved, oil and water continued to leak out of intermediate casing.
11/01 Drilled out CIBP @ 8500'. Performed swab test. Set CIBP @ 8700' for P&A.

Formation Tops:

Rustler	1552'
Yates	2905'
Queen	3798'
Grayburg	4085'
San Andres	4445'
Glorieta	6130'
Clearfork	6190'
Abo Shale	8274'
Abo Reef	8294'