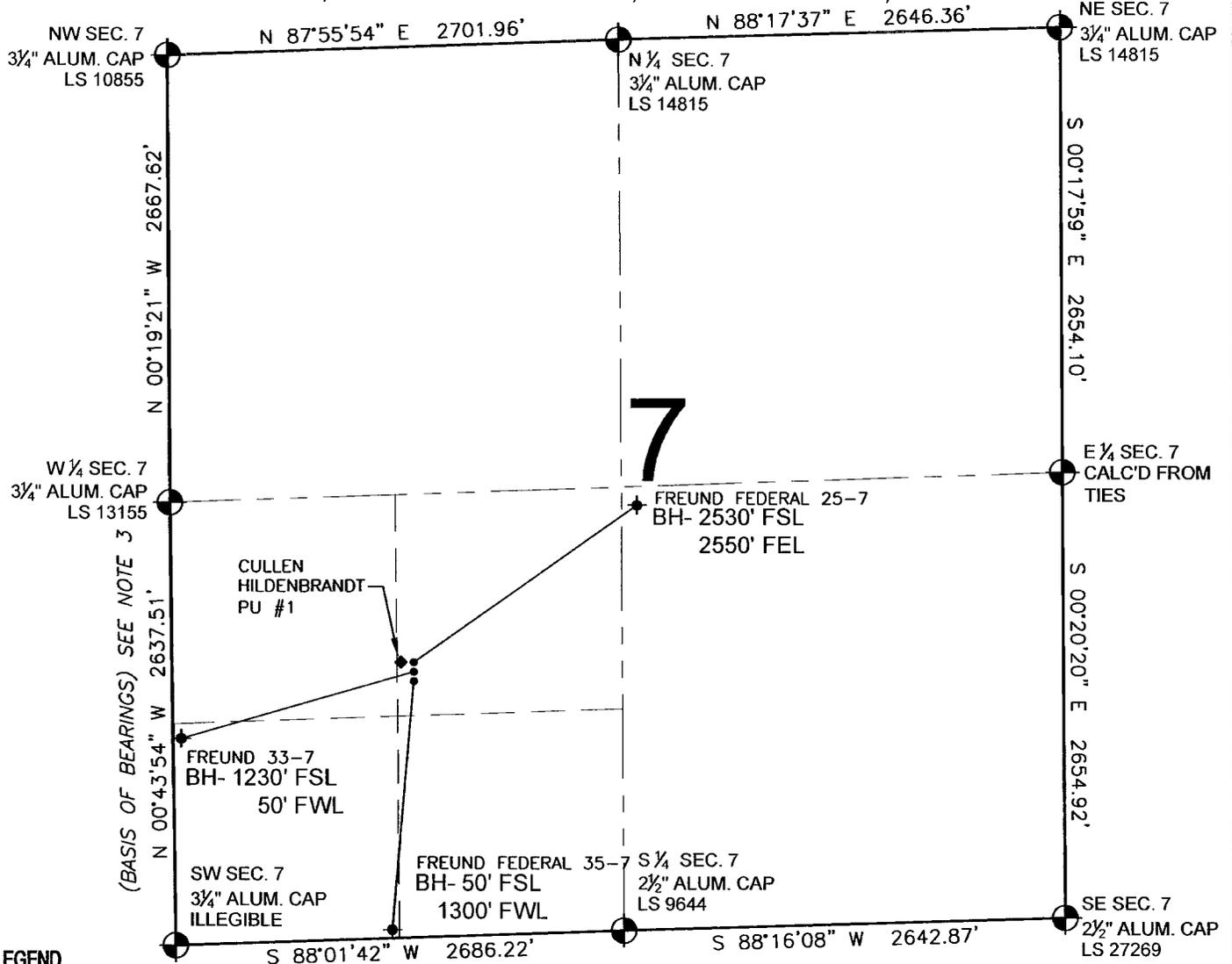


PAD DRAWING - FREUND FEDERAL 3 PAD

SECTION 7, TOWNSHIP 3 NORTH, RANGE 66 WEST, 6TH P.M.



LEGEND

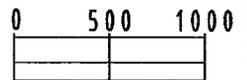
- = EXISTING MONUMENT
- ◆ = BOTTOM HOLE
- BH= BOTTOM HOLE
- = PROPOSED WELL
- ◆ = EXISTING WELL

NOTES:

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215 (PDOP VALUE IS LESS THAN 6.0, LATITUDE AND LONGITUDE ARE ACCURATE TO 5 DECIMAL PLACES, AND GPS OBSERVATIONS ARE DIFFERENTIAL AND DONE BY QUALIFIED PERSONNEL.)
- ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.
VERTICAL = NAVD88; HORIZONTAL = NAD83/92
- THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
- DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.

NOTES:

- FREUND FEDERAL 35-7 TO BE AT 1606' FSL, 1449' FWL.
- BOTTOM HOLE AT 50' FSL & 1300' FWL.
- FREUND 33-7 TO BE AT 1622' FSL, 1449' FWL.
- BOTTOM HOLE AT 1230' FSL & 50' FWL.
- FREUND FEDERAL 25-7 TO BE AT 1638' FSL, 1449' FWL.
- BOTTOM HOLE AT 2530' FSL & 2550' FEL.
- CULLEN HILDENBRANDT PU #1 IS 1637' FSL, 1402' FWL.



SCALE: 1"=1000'

REVISIONS	
INITIAL	DATE
CP	03-30-09
SMF	04-01-09
SMF	05-11-09

PREPARED BY:

PFS llc
 Petroleum Field Services, LLC
 1801 W. 13th Ave.
 Denver, CO 80204

KERR-MCGEE OIL & GAS ONSHORE LP

FIELD DATE: 02-26-09	PAD NAME: FREUND FEDERAL 3 PAD
DRAWING DATE: 03-03-09	SURFACE LOCATION:
BY: SMF	WELD COUNTY, COLORADO NE 1/4 SW 1/4, SEC. 7, T3N, R66W