



CONSUMERS ENERGY

WELL: P-201

FIELD: WILDCAT

LOCATION: SAINT CLAIRE COUNTY, MI, USA

OFFSET VSP

ENCLOSURE 4: OVSP CORRELATION

ACQUISITION BY BAKER HUGHES GE JUNE 2019
PROCESSED BY BAKER HUGHES GE JUNE 2019

ACQUISITION INFORMATION

KB ELEVATION 656 FT AMSL
MINIMUM DEPTH 525 FT (MD KB)
MAXIMUM DEPTH 2375 FT (MD KB)
CASING 7 IN O - 2490
ENERGY SOURCE VIBRATOR
SOURCE ELEVATION 643 FT AMSL
SOURCE EASTING FROM WELLHEAD -149.6 FT
SOURCE NORTHING FROM WELLHEAD -956.6 FT
RECORD LENGTH 6 SECONDS
SAMPLE INTERVAL 1 MS

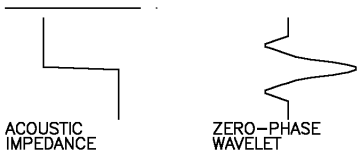
PROCESSING

Edit, stack and pick first arrival times
Horizontal and Vertical Rotation.
Repick first arrivals on Direct component.
Correction for geometric spreading using $t^{**2.0}$
Subtract downgoing P and S wavefields.
Model based rotation to extract upgoing P and S wavefields.
Zero phase bandpass filter: 8(18) - 135(36) Hz(dB/Oct).
Deterministic deconvolution of upgoing P and S wavefields:
158 msec operator derived from downgoing P-waves, 5% WN
Zero phase bandpass filter: 8(18) - 135(36) Hz(dB/Oct).
Enhancement: 3-point median filter.
Zero phase bandpass filter: 8(18) - 135(36) Hz(dB/Oct).
Imaging by CDP Transform + Front mute.
Conversion depth-time using vel. model modified from ZVSP.
Zero phase, Normal polarity, bandpass filter:
8(18)-110(36) Hz(dB/oct)

Vertical scale: 40 cm/sec
Seismic Datum: Ground Level = 643 ft AMSL
Replacement velocity: 6,000 ft/sec
Note: Surface Seismic Datum=1,000 ft AMSL & Vrep=10,000 ft/s.

NORMAL POLARITY

AN INCREASE IN ACOUSTIC IMPEDANCE
IS DISPLAYED AS A PEAK



OVSP Ovelaid to Crossline 66
Time shifts: Xline= -15 ms ; OVSP= +10 ms. OVSP 8-110 Hz

OVSP CDP Transform
+10 ms time shift and 8-135 Hz

