AMOCO

Amoco Production Company
Seismic Observers Form

Party: 045 — Date: 8 / 19 / 90 (Month / Day / Year)

County: DANIELS — State: MONT. — Line: OAC ___ No. 0010

Seis's: SM-7 (Type) V (Comp.) ___ (Direction) — Seis's: ___ (Type) ___ (Comp.) ___ (Direction)

Seis's: ___ (Type) ___ (Comp.) ___ (Direction) — Ref. Amoco NB# ___ pg. ___

Amplifiers: Geosource (Manuf.), SCR III + IV (Model), 50/430 (No. Channels), Samp. Int. 2/4 Ms; Rec. Lth 32/50 Sec.

Filter: — (low) / — (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)

SGR'S: 80-III's 211-IV's (No. In Field) — SGR Trucks: 2-III's 5-IV's (No. In Field)

Spread Layout

Directions: WEST (Increasing SP. No.), WEST (Tr. 1 to Tr. 2) — No. Fold ___

Distance (Tr. No.): ___, ___, ___, ___ — SeisGrp. Int. 50M

No. Seis. Per Grp.: 12 (Total No.) = 12 (No. Inline), ___ (No. Xline) — Spacing 4.2m (Inline), ___ (Xline)

Each Source Pattern

No. Indiv. Sources: 8 (Inline), ___ (Xline) — Spacing: Bumper To Bumper (Inline), ___ (Xline)

No. Moves Per Source: — (Inline), ___ (Xline) — Dist. Each Move: — (Inline), ___ (Xline)

Vibrator: #18 P.W. (Model)

Sweep: 10 To 90 Hz. (Frequency), 30 (Length) — Drive 80%

Vibrator Electronic: PELTON (Manuf.) — ADVANCED II (Model)

Reference Taper: 500ms — Mode: LINEAR — %: 100

Reference Phase: 0°

General: Source Point Number		File Number	Time	Spread: Controller Location	Source Point Number At Seismometer Group For The Following Traces (IV's): Tr.	Tr.	(III's): Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Vibrating: Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Instruments: Gains: Preamp.	Mode	T=Trucks on Line	Remarks: (Additional remarks on back of sheet.)
			7:49															CALLING IN BOXES
5869	NOISE FILE	168	10:44		1444	1874	5251	5300				8	1	E	45	V		
1869		169	10:55									8	8	E	45	V	*	SHAKING EVERY OTHER V.P. *
1867		170	11:33									7						VIB #33 - RADIO PROBLEMS
1865		171	11:49									6					T	VIB #83 - LVDT WENT OUT - 2-3 VIBS MISSING EVERY SWEEP - DEMO SPOT
1863		172	11:58									6						
1861		173	12:08									6						
1859		174	12:17									7						VIB #83 BACK IN
1857		175	12:26															
1855		176	12:35															
1853		177	12:44															
1851		178	12:53															
1849		179	1:09															
1847		180	1:18									7						
1845		181	1:30									8						
1843		182	1:39															
1841		183	1:48															
1839		184	1:57		1444	1874	5251	5300										

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather: Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind: (0-12 MPH) ☑; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: 60-90 °F;
Trail Conditions: COUNTY ROAD

Leave Town: 6:51 — Leave Field: 6:32 — Exprm Time: ___
Arrive Field: 7:37 — Arrive Town: 7:28 — Down Time: ___
Total Travel Time: 2 hr. — Number Men Rec.: 17

Daily Summary
No Profiles: 45 VPS 42
Miles Traversed: ___

Total To Date For Month
No Profiles: 45 VPS 42
Miles Traversed: ___

Observer: McEvoy-Zebroski — Page 1 of 3

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 9 / 90 (Month / Day / Year)

County DANIELS State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces IV's Tr.	Tr.	III's Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains MODE	TRUCKS ON LINE
1837		185	2:07		1444	1874	5251	5300				8	8	E	45	V	
1835		186	2:15														
1833		187	2:25														
1831		188	2:34														
1829		189	2:43														
1827		190	2:53														
1825		191	3:02														
1823		192	3:11														
1821		193	3:20														
1819		194	3:29														
1817		SKIP															
1815		1															
1813		SKIP															
1812		195	3:43														
1811		196	3:53														
1809		197	4:02														
1807		198	4:11									8					
1802		199	4:24		1444	1874	5251	5300				7					

Remarks: (Additional remarks on back of sheet.)

WIND HAS PICKED UP TO 13-24MPH RANGE

* 1ST V.P. IN DITCHES *

SKIP - DITCH TOO STEEP

#83 - WINCHING OUT TENDER

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 2 of 3

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 9 / 90 (Month / Day / Year)

County DANIELS State MONT. Line (OAC) ____ 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments			
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains Mode	T=Trucks on Lines
1801		200	4:34		1444	1874	5251	5300				7	8	E	45	V	
1796		201	4:47									8					
1795		202	4:56														
1794		203	5:07														
1793		204	5:16														
1788		205	5:28														
1787		206	5:36														T
1785		207	5:46														
1783		208	5:55									8					
1781		209	6:08									7					
1779		210	6:17														
5779	NOISE FILE	211	6:20		1444	1874	5251	5300									
	E.O.R.	9999	6:21														

Remarks: (Additional remarks on back of sheet.)

VIB # 86 - RADIO PROBLEMS

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 3 of 3

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 10 / 90 (Month / Day / Year)

County Daniels State Mont. Line OAC 10 No.

Spread Layout
Directions West (Increasing SP. No.), West (Tr. 1 to Tr 2) No. Fold ____ ____
Distance Tr No. ____, ____, ____, ____ SeisGrp. Int. 50 m

Each Source Pattern
No. Indiv. Sources 8 (Inline), ____ (Xline) Spacing Bumper to Bumper (Inline), ____ (Xline)
No. Moves Per Source – (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator #18 P.W. (Model)
Sweep 10 To 56 Hz, 30 Drive 80%
(Frequency, Length)

No. Seis. Per Grp. 12 = 12 (Total No.), ____ (No. Inline), ____ (No. Xline) Spacing 4.2 m (Inline), ____ (Xline)

Seis's SM-1 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)
Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____
Amplifiers Geospace (Manuf.), SGR IV (Model), 400 (No. Channels), Samp. Int. 4 Ms; Rec.Lth. 50 Sec.
Filter – (low) / – (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)
SGR'S IIIs (No. In Field) SGR Trucks 5 IIIs (No. In Field)
Vibrator Electronic Pelton Advance II (Manuf. / Model)
Reference Taper 500 ms Mode LINEAR % 100%
Reference Phase 0°

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	MODE	T=Truck on Line
			7:49														
5772	Noise File	212	9:21		1444			1874				8	1	E	45	V	
1772		Skip															
1775		Skip															
1773		Skip															
1772		213	9:37														
1771		214	9:46														
1769		215	9:57														
1768		216	10:07														
1765		Skip															
1763		Skip															
1761		11															
1759																	
1757		Skip															
1755		217	10:24														
1754		218	10:34														
1753		219	10:43														
1752		220	10:52		1444			1874									

Remarks: (Additional remarks on back of sheet.)

Calling in Boxes
* Shaking every other up *, NO CROSSLINE TODAY
Skip for Guide wires, culverts & Farmer cutting Hay
Skip ground too soft
Skip for farmer cutting Hay

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☑; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: 60 – 90 °F;
Trail Conditions County Roads

Leave Town 6:51 Leave Field 6:04 Exprm Time ____
Arrive Field 7:37 Arrive Town 7:00 Down Time ____
Total Travel Time 2hrs Number Men Rec. 17

Daily Summary
No Profiles 80 vp / 47
Miles Traversed ____

Total To Date For Month
No Profiles 125 vp / 89
Miles Traversed ____

Observer McEvoy - Zebroski

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 10 / 90 (Month / Day / Year)

County Daniels State Mont. Line ____ (OAC) 10 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains MODE	T=TAPE ON LINE
1749		221	11:04		1444			1874				8	8	E	45	V	
1747		222	11:14														
1745		223	11:23														
1743		Skip															
1741		Skip															
1739		224	11:34														
1738		225	11:44														
1737		226	11:52														
1735		227	12:01														
1733		228	12:11														
1730		229	12:27														
1729		Skip															
1727		230	12:41														
1726		231	12:49														
1725		232	12:58														
1723		233	1:13														
1721		234	1:22														
1719		235	1:33		1444			1874									

Remarks: (Additional remarks on back of sheet.)

} Skip No Room in Ditch for Vibs

Skip for Culvert

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____
Observer ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 10 / 90 (Month / Day / Year)

County Daniels State Mont. Line ____ (OAC) 10 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____ SeisGrp. Int. ____

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline) / ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Ref. Amoco NB#** ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Near-Seis. Offset: Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Gains: MODE	T=Truck on LINE
1717		236	1:45		1444			1874				8	8	E	45	V	
1715		237	1:55														
1713		238	2:04														
1711		239	2:14														
1709		240	2:23														
1707		241	2:33														T
1706		242	2:42														T
1703		243	2:57														T
1701		244	3:08														
1699		245	3:18														T
1697		246	3:30														T
1695		247	3:39														
1693		248	3:48														
1691		249	3:58														
1689		250	4:07														
1687		251	4:16														
1685		252	4:25														
1683		253	4:35		1444			1874									

Remarks: (Additional remarks on back of sheet.)

Replacing set on 1705

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____
Observer ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 10 / 90 (Month / Day / Year)

County Daniels State Mont. Line OAC 10 No.

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr 2) No. Fold _____ _____

Distance Tr No. _____, _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep _____ (Frequency) To _____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Seis's _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Ref. Amoco NB# _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No. Channels), Samp. Int. _____ Ms; Rec.Lth _____ Sec.

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) SGR Trucks _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains mode	T=Truck on Line
1681		254	4:45		1444			1874				8	8	E	45	V	
1679		255	4:54														
1677		256	5:03														
1675		Skip															
1673																	
1671																	
1669																	
1667																	
1665																	
1663																	
1661																	
1659																	
1657																	
1655																	
1653																	
1651																	
1649																	
1647		Skip			1444			1874									

Remarks: (Additional remarks on back of sheet.)

Skip too steep & For the town of Whitetail

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____
Observer _____

Total To Date For Month
No Profiles _____
Miles Traversed _____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 10 / 90 (Month / Day / Year)

County DANIELS State Mont. Line ____ (OAC) 10 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	mode	T=Trunk on Line
1645		Skip			1444			1874				8	8	E	45	V	
1643		11															
1641		11															
1639		Skip															
1637		257	5:28														
1636		258	5:38														T
1635		259	5:47														
1633		Skip															
1631		11															
1629		Skip															
5635	NOISE File	260	5:49		1444			1874				8	1	E	45	V	

Remarks: (Additional remarks on back of sheet.)

- 1645, 1643, 1641, 1639: Skip for town of Whitetail
- 1633, 1631, 1629: Skip, Ditch too steep
- 5635: TRACTOR on Road At 1520

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 5 of 5

AMOCO

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month Day Year)

County DANIELS/SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout
Directions WEST (Increasing SP. No.), WEST (Tr. 1 to Tr. 2) No. Fold ____
Distance (Tr No.) ____, ____, ____, ____ SeisGrp. Int. 50m

Each Source Pattern
No. Indiv. Sources 8 (Inline), ____ (Xline) Spacing BUMPER-TO-BUMPER (Inline) (Xline)
No. Moves Per Source — (Inline), ____ (Xline) Dist. Each Move — (Inline), ____ (Xline)

Vibrator #18 P.W. (Model)

No. Seis. Per Grp. 12 (Total No.) = 12 (No. Inline), ____ (No. Xline) Spacing 4.2m (Inline) ____ (Xline)

Sweep 10 To 56 Hz. (Frequency) 30 (Length) Drive 80%

Seis's SM-7 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)
Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers GEOSPACE (Manuf.), SGR IV (Model), 508 (No. Channels), Samp. Int. 4 Ms; Rec.Lth 50 Sec.
Filter — (low) / — (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)

SGR'S 211-IV'S (No. In Field) SGR Trucks 5 IV'S (No. In Field)

Vibrator Electronic PELTON (Manuf.) ADVANCED II (Model)
Reference Taper 500ms? Mode LINEAR % 100
Reference Phase 0°

Source Point Number		File Number	Time	Controller Location	Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Preamp.	MODE	T=TRUCKS ON LINE	Remarks: (Additional remarks on back of sheet.)
			7:41															CALLING IN BOXES
5628	NOISE FILE	261	9:40		1628			1122				8	1	E	45	V	T	CLIENT DRIVING ON LINE
1628		262	9:49									8	8	E	45	V		SHAKING EVERY V.P.
1627		263	9:58															
1626		264	10:07															
1625		265	10:15															
1624		266	10:24															
1623		267	10:33															
1622		268	10:42															
1621		269	10:51															
1620		270	11:02															
1619		271	11:11															
1618		272	11:21															
1617		273	11:29															
1615.		274	11:39															BACK TO 100 METER V.P. INTERVALS
1613		SKIP																
1611		SKIP																SKIP FOR GULLY
1609		275	11:53		1628			1122										

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☑ (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: 55-85 °F;
Trail Conditions COUNTY ROAD

Leave Town 6:49 Leave Field 6:46 Exprm Time ____
Arrive Field 7:28 Arrive Town 7:28 Down Time ____
Total Travel Time 1½hr Number Men Rec. 17

Daily Summary
No Profiles 94 VPS 45
Miles Traversed ____

Total To Date For Month
No Profiles 229 VPS 133
Miles Traversed ____

Observer McEVOY? ZEBROSKI?

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month / Day / Year)

County DANIELS/SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____ SeisGrp. Int. ____

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Ref. Amoco NB#** ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp. Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	Mode	Trucks on Line
1607		276	12:03		1678			1122				8	8	E	45	V	
1605		277	12:13														
1603		278	12:22														
1601		279	12:31														
1599		280	12:40														
1597		281	12:49														
1595		282	12:58														
1593		SKIP															
1591		SKIP															
1589		SKIP															
1587																	
1585																	
1583																	
1581																	
1579																	
1577																	
1575																	
1573		SKIP			1678			1122									

Remarks: (Additional remarks on back of sheet.)

WIND PICKING UP TO 15-24 MPH RANGE

DITCH TOO STEEP

NO PERMIT

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 2 of 6

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month / Day / Year)

County DANIELS/SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp. Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		Tetherks on Line
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	MODE	
1571		SKIP			1678			1122				8	8	E45	V		
1569																	
1567																	
1565																	
1563																	
1561																	
1559																	
1557																	
1555																	
1553																	
1551																	
1549																	
1547																	
1545																	
1543																	
1541																	
1539																	
1537		SKIP			1678			1122									

Remarks: (Additional remarks on back of sheet.)

NO PERMIT

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____
Observer ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month / Day / Year) 10 7

County DANIELS/SHERIDAN State MONT. Line (OAC) ____ 0012 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	Mode T=Trucks Low Line	
1535	SK IP				1628			1122									
1533	SK IP																
1532		283	1:32														
1531		284	1:42														
1528		285	1:52														
1527		286	2:01														
1526		287	2:10														
1525		288	2:19														
1524	SK IP																
1523		1															
1521	SK IP																
1519		289	2:37													T	
1517		290	2:51														
1515		291	3:02														
1513		292	3:16														
1511		293	3:26														
1509		294	3:35														
1508		295	3:44		1628			1122									

Remarks: (Additional remarks on back of sheet.)

SK IP FOR NO PERMIT

DITCH TOO STEEP

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 4 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month / Day / Year)

County DANIELS/SHERIDAN State MONT. Line (OAC) ____ (No.) 0017 10

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per'Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		Tr. Trucks on Line
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	Mode	
1505		296	4:07		1628			1122				8	8	E	45	V	T
1503		297	4:17														
1501		298	4:28														
1499		299	4:38														
1497		300	4:48														
1495		301	4:58														
1493		302	5:08														
1491		303	5:17														
1490		304	5:26														
1487		305	5:39														
1485		306	5:49														
1483		SKIP															
1481		307	6:02														
1479		308	6:13														
1477		309	6:22														
1476		310	6:31														T
1473		SKIP															
1471		SKIP			1678			1122									

Remarks: (Additional remarks on back of sheet.)

ROAD

T

} SKIP: FOR NO PERMIT

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 5 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 11 / 90 (Month / Day / Year)

County DANIELS / SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec. Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Near-Seis. Offset: Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Gains: Mode	Trucks or Line
1469		SKIP			1628			1122									
1467																	
1465																	
1463																	
1461																	
1459		SKIP															
5476	NOISE FILE	311	6:33		1628			1122									

Remarks: (Additional remarks on back of sheet.)

SKIP FOR NO PERMIT

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 6 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 12 / 90 (Month / Day / Year)

County Daniels/Sheridan State Mont. Line (OAC) 0010 (No.)

Spread Layout Directions EAST (Increasing SP. No.), EAST (Tr. 1 to Tr. 2) No. Fold ____

Distance (Tr. No.) ____, ____, ____, ____ SeisGrp. Int. 50m

No. Seis. Per Grp. 12 = 12 (Total No.), ____ (No. Inline, No. Xline) Spacing 4.2m (Inline), ____ (Xline)

Each Source Pattern No. Indiv. Sources 8 (Inline), ____ (Xline) Spacing Bumper to Bumper (Inline), ____ (Xline)

No. Moves Per Source ~ (Inline), ____ (Xline) Dist. Each Move ~ (Inline), ____ (Xline)

Vibrator Model #18 P.W.

Sweep 10 (Frequency) To 56 Hz, 30 (Length) Drive 80%

Seis's SM-7 (Type) V (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Ref. Amoco NB# ____ pg. ____

Amplifiers GEOSPACE (Manuf.), SGR IV (Model), 400 (No. Channels), Samp. Int. 4 Ms; Rec.Lth. 50 Sec.

Filter ~ (low) / ~ (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)

SGR'S 210 IV (No. In Field) SGR Trucks 5 IV (No. In Field)

Vibrator Electronic Pelton Advance II (Manuf. / Model)

Reference Taper 500 MS Mode LINEAR % 100 %

Reference Phase 0°

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	MODE	T=Truck on Line
			7:29														
5457	NOISE File	312	9:33		1628			1084				8	1	E	45	V	
1457		313	9:47									8	8	E	45	V	T
1455		314	10:00														T
1453		315	10:09														
1451		316	10:18														
1449		317	10:27														
1447		318	10:35														
1445		319	10:44														T
1443		320	10:53														
1441		321	11:01														
1439		322	11:15														T
1437		323	11:24														T
1435		324	11:32														
1433		325	11:41														
1431		326	11:50														
1429		327	12:01														
1427		328	12:10		1628			1084									

Remarks: (Additional remarks on back of sheet.)

Calling in Boxes

Vibs didn't move on listen time for this up only

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather: Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;

Wind: (0-12 MPH) ☑; (13-24 MPH) ☐; (25-40 MPH) ☐;

Temperature: 55-85 °F;

Trail Conditions County Roads

Leave Town 6:48 Leave Field 6:19 Exprm Time ____

Arrive Field 7:23 Arrive Town 7:10 Down Time ____

Total Travel Time ____ Number Men Rec. 17

Daily Summary No Profiles 104 vp / 49 Miles Traversed ____

Total To Date For Month No Profiles 323 vp / 182 Miles Traversed ____

Observer McEvoy - Zebroski

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 12 / 90 (Month / Day / Year)

County Daniels/Sheridan State Mont. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Ref. Amoco NB#** ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments			
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp. Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		T=Truck on Line	Remarks: (Additional remarks on back of sheet.)
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	mode		
1425		329	12:18		1628			1084				8	8	E	45	V		
1423		330	12:27															
1421		331	12:36															
1419		332	12:44															
1417		333	12:53															
1415		334	1:02															
1413		335	1:11															
1411		336	1:19															
1409		337	1:28															Wind picking up
1407		338	1:37														T	
1405		339	1:50														T	
1403		340	2:00															Vibs driving around
1401		Skip																
1399																		
1397																		
1395																		Skip for no permit
1393																		
1391		Skip			1628			1084										

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 2 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 12 / 90 (Month / Day / Year)

County Daniels / Sheridan State Mont. Line ____ (OAC) D010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp. Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		T=Truck on Line
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	MODE	
1389		Skip			1628			1084									
1387																	
1385																	
1383																	
1381																	
1379																	
1377																	
1375																	
1373																	
1371																	
1369																	
1367																	
1365																	
1363																	
1361																	
1359																	
1357																	
1355		Skip			1628			1084									

Remarks: (Additional remarks on back of sheet.)

Skip for No permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 3 of 6

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 12 / 90 (Month / Day / Year)

County Daniels / Sheridan State Mont. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ To ____ Hz, ____ (Length) Drive ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Ref. Amoco NB#** ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		T=Truck On Line
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	MODE	
1353		Skip			1628			1084									
1351																	
1349																	
1347																	
1345																	
1343																	
1341																	
1339																	
1337																	
1335																	
1333																	
1331																	
1329																	
1327																	
1325																	
1323																	
1321																	
1319		Skip			1628			1084									

Remarks: (Additional remarks on back of sheet.)

Skip for No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 12 / 90 (Month / Day / Year)

County Daniels / Sheridan State Mont. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ ____ ____

Seis's ____ ____ ____ Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments			
Source Point Number	..	File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode	T=Truck on Line
1317		Skip			1668			1084									
1315																	
1313																	
1311																	
1309																	
1307																	
1305																	
1303																	
1301																	
1299																	
1297																	
1295																	
1293		Skip															
1291		341	2:50									8	8	E	45	V	
1289		342	2:59														
1287		343	3:08														
1285		344	3:16														
1283		345	3:26		1668			1084									

Skip for No Permit

Remarks: (Additional remarks on back of sheet.)

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____
Observer ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 12 / 70 (Month / Day / Year)

County Daniels / Sheridan State Mont. Line (OAC) 0010 (No.)

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr. 2) No. Fold _____ _____

Distance _____ (Tr. No.), _____, _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep _____ (Frequency) To _____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Seis's _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Ref. Amoco NB# _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No. Channels), Samp. Int. _____ Ms; Rec.Lth _____ Sec.

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) SGR Trucks _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Near-Seis. Offset: Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Gains: Mode	T=Truck or Line
1281		346	3:45		1628			1084				8	8	E	45	V	
1279		347	3:47														
1277		348	3:55														
1275		349	4:04														
1273		350	4:13														
1271		351	4:22														
1269		352	4:30														
1267		353	4:39														
1265		354	4:48														
1263		355	5:02														
1261		356	5:10														
1259		357	5:19														
1257		358	5:28														
1255		359	5:42														
1253		360	5:52														
1251		361	6:02									8	8	E	45	V	
5251	NOISE FILE	362	6:03		1628			1084				8	1	E	45	V	

Remarks: (Additional remarks on back of sheet.)

These 3 files have a 9.999 T zero delay

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____

Total To Date For Month
No Profiles _____
Miles Traversed _____

Observer _____ Page 6 of 6

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 13 / 90 (Month / Day / Year)

County SHERIDAN / DANIELS State MONT- Line ____ (OAC) 0010 (No.)

Spread Layout

Directions WEST (Increasing SP. No.), WEST (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance (Tr. No.) ____, ____, ____, ____, ____ SeisGrp Int. 50m

No. Seis. Per Grp. 12 (Total No.) = 12 (No. Inline), ____ (No. Xline) Spacing 4.2m (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources 8 (Inline), ____ (Xline) Spacing Bumper-To-Bumper (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator #18 P.W. (Model)

Sweep 10 (Frequency) To 56 Hz, 30 (Length) Drive 80% SGR'S 211-IV's (No. In Field) SGR Trucks 5-IV's (No. In Field)

Seis's SM-7 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers GEOSPACE (Manuf.), SGR IV (Model), 400 (No. Channels), Samp. Int. 4 Ms; Rec.Lth 50 Sec.

Filter ____ (low) / ____ (high) Hz. 1PW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)

Vibrator Electronic PELTON (Manuf.) ADVANCED II (Model)

Reference Taper SUOMS Mode LINEAR % 100

Reference Phase 00

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode T=Trucks on Line	
			8:00														CALLING IN BOXES
5457	NOISE FREE	363	10:03		1084			1628				8	1	E	45	V	COMBINE WORKING 1455→1427
1457		364	10:13									8	8	E	45	V	
1455		365	10:22														
1453		366	10:30														
1451		367	10:39														
1449		368	10:48														9.999 SEC T-ZERO DELAY
1447		369	10:57													T	NO DELAY
1445		370	11:05														
1443		371	11:14													T	
1441		372	11:22														
1439		373	11:31														
1437		374	11:40														
1435		375	11:51														
1433		376	12:01														5.999 SEC T-ZERO DELAY
1431		377	12:09														NO DELAY
1429		378	12:17														
1427		379	12:26		1084			1628									

Remarks: (Additional remarks on back of sheet.)

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☒; (25–40 MPH) ☐;
Temperature: 65-90 °F;
Trail Conditions COUNTY ROAD

Leave Town 6:58 Leave Field ____ Exprm Time ____
Arrive Field 7:41 Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. 18

Daily Summary
No Profiles 19 VPS 19
Miles Traversed ____

Total To Date For Month
No Profiles 342 VPS 201
Miles Traversed ____

Observer MCEVOY-ZEBROSKI Page 1 of 2

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 13 / 90 (Month / Day / Year)

County SHERIDAN/DANIELS State MONT. Line C (OAC) 0010 (No.)

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr. 2) No. Fold _____ _____

Distance _____ (Tr. No.), _____, _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep _____ (Frequency) To _____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Seis's _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Ref. Amoco NB# _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No. Channels), Samp. Int. _____ Ms; Rec. Lth _____ Sec.

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) SGR Trucks _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode	F=Trucks on Line
1425		380	12:35		1084			1628				8	8	E	45	V	T
1423		381	12:44		1084			1628									T
1421		382	12:53		1084			1628									

Remarks: (Additional remarks on back of sheet.)

HOLDING UP FOR WIND - SHUT DOWN PER DOUG - TOO WINDY

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____

Total To Date For Month
No Profiles _____
Miles Traversed _____

Observer _____ Page 2 of 2

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County SHERIDAN / DANIELS State MONT. Line OAC 0010 No.

Spread Layout
Directions EAST (Increasing SP. No.), EAST (Tr. 1 to Tr 2) No. Fold ____ ____
Distance Tr No. ____, ____, ____, ____ SeisGrp. Int. 50m

No. Seis. Per Grp. 12 = Total No. 12 / No. Inline ____ / No. Xline Spacing 4.2m Inline / Xline

Each Source Pattern
No. Indiv. Sources 8 Inline / ____ Xline Spacing Bumper to Bumper Inline / Xline
No. Moves Per Source — Inline / ____ Xline Dist. Each Move — Inline / ____ Xline

Vibrator #18 P.W. (Model)
Sweep 10 (Frequency) To 56 Hz, 30 (Length) Drive 80%

Seis's SM-7 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)
Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____
Amplifiers GEOSPACE (Manuf.) SGR IV (Model) 400 (No. Channels) Samp. Int. 4 Ms; Rec.Lth 50 Sec.
Filter — (low) / — (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. out (In or Out)
SGR'S 213 IV (No. In Field) SGR Trucks 5 III (No. In Field)
Vibrator Electronic Pelton Advance II
Reference Taper 500 ms (Manuf.) Mode LINEAR (Model) % 100%
Reference Phase 0°

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode	T=Trunks and Line
			7:53														
5419	NOISE FILE	383	9:26		1084			1628				8	1	E	45	V	
1419		384	9:34									8	8	E	45	V	T
1417		385	9:43														T
1415		386	9:51														
1413		387	10:00														T
1411		388	10:08														
1409		389	10:17														T
1407		390	10:26														T
1405		391	10:34														
1403		392	10:43														
1401		Skip															
1399																	
1397																	
1395																	
1393																	
1391																	
1389		Skip			1084			1628									

Remarks: (Additional remarks on back of sheet.)

Calling in Boxes

Vibs driving around

Skip for No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☑; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: 55 – °F;
Trail Conditions COUNTY ROAD

Leave Town 6:54 Leave Field 6:45 Exprm Time ____
Arrive Field 7:37 Arrive Town 7:11 Down Time ____
Total Travel Time ____ Number Men Rec. 18

Daily Summary
No Profiles 105 up / 46
Miles Traversed ____

Total To Date For Month
No Profiles 429 up / 247
Miles Traversed ____

Observer McEvoy - Zebroski Page 1 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County Daniels / Sheridan State MONT. Line OAC 6010 No.

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr. 2) No. Fold _____

Distance _____ (Tr No.), _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep _____ (Frequency) To _____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Seis's _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) Ref. Amoco NB# _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No Channels), Samp. Int. _____ Ms; Rec.Lth _____ Sec.

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) SGR Trucks _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		Tr Mark on Line
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	Mode	
1387		Skip			1084			1628									
1385																	
1383																	
1381																	
1379																	
1397																	
1375																	
1373																	
1371																	
1369																	
1367																	
1365																	
1363																	
1361																	
1359																	
1357																	
1355																	
1353		Skip			1084			1628									

Remarks: (Additional remarks on back of sheet.)

Skip for No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____

Total To Date For Month
No Profiles _____
Miles Traversed _____

Observer _____ Page 2 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County Daniels / Sheridan State MONT Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode T=Truck	In Cab
1351		Skip			1084			1628									
1349																	
1347																	
1345																	
1343																	
1341																	
1339																	
1337																	
1335																	
1333																	
1331																	
1329																	
1327																	
1325																	
1323																	
1321																	
1319																	
1317		Skip			1084			1628									

Remarks: (Additional remarks on back of sheet.)

Skip for No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 3 of 6

Amoco Production Company
Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County Daniels / Sheridan State Mont Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	mode	T=Truck s=Line
1315		Skip			1084			1628									
1313																	
1311																	
1309																	
1307																	
1305																	
1303																	
1301																	
1299																	
1297																	
1295																	
1293																	
1291		Skip															
1289		393	11:51									8	8	E 45 V			
1285		394	12:00														
1281		395	12:10														
1277		396	12:20														
1273		397	12:30		1084			1628									

Remarks: (Additional remarks on back of sheet.)

Skip for No Permit

Vibs will be shaking 200 m. up intervals

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 4 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County Daniels / Sheridan State Mont. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Ref. Amoco NB#** ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) **SGR Trucks** ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Near-Seis. Offset: Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Gains: Mode	T = Truck on Line
1269		398	12:39		1084			1628				8	8	E	45	V	
1265		399	12:49														
1261		400	12:58														
1257		401	1:08														
1253		402	1:17														
1249		403	1:27														
1245		404	1:43														
1241		405	1:53														
1237		406	2:04														
1233		407	2:13														T
1229		408	2:23														
1225		Skip															
1221		"															
1217		Skip															
1213		409	2:37														
1209		410	2:47														
1205		411	2:56														
1201		412	3:06		1084			1628									

Remarks: (Additional remarks on back of sheet.)

* 5.999 T ZERO DELAY

} Skip for House

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 14 / 90 (Month / Day / Year)

County Daniels / Sheridan State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.) , ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.) , ____ , ____ , ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline) , ____ (No. Xline) Spacing ____ (Inline) , ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline) , ____ (Xline) Spacing ____ (Inline) , ____ (Xline)

No. Moves Per Source ____ (Inline) , ____ (Xline) Dist. Each Move ____ (Inline) , ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.) , ____ (Model) , ____ (No. Channels) , Samp. Int. ____ Ms; Rec. Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments			
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode	T = Truck on Line	Remarks: (Additional remarks on back of sheet.)
1197		413	3:16		1084			1628				8	8	E	45	V		* 5.999 T ZERO DELAY
1193		414	3:25														T	
1189		415	3:34														T	
1185		416	3:43														T	
1181		417	3:53														T	
1177		418	4:02														T	
1173		419	4:11														T	
1169		420	4:20														T	
1165		421	4:34															* 5.999 T ZERO DELAY
1161		422	4:43															
1157		423	4:53															
1153		Skip																Skip for Pipeline
1149		424	5:05															
1145		425	5:14															
1141		426	5:24															
1137		427	5:34														T	
1133		428	5:43									8	8	E	45	V	T	
5133	NOISE FILE	429	5:45		1084			1628				8	1	E	45	V		

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 6 of 6

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 15 / 90 (Month / Day / Year)

County SHERIDAN State MONT. Line ____ OAC 0010 No.

Spread Layout

Directions WEST (Increasing SP. No.), WEST (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. 50m

No. Seis. Per Grp. 12 (Total No.) = 12 (No. Inline), ____ (No. Xline) Spacing 4.2m (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources 8 (Inline), ____ (Xline) Spacing Bumper-To-Bumper (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator #18 P.W. (Model)

Sweep 10 (Frequency) To 56 Hz, 30 (Length) Drive 80%

Seis's SM-7 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers GeoResearch (Manuf.), SGR III & IV (Model), 50/400 (No. Channels), Samp. Int. 2/4 Ms; Rec.Lth 32/5? Sec.

Filter ____ (low) / ____ (high) Hz. DPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. OUT (In or Out)

SGR's 201-IV's 80-III's (No. In Field) SGR Trucks 5-IV's 2-III's (No. In Field)

Vibrator Electronic PELTON ADVANCED II (Manuf. / Model)

Reference Taper 500ms Mode LINEAR % 100

Reference Phase 0°

Source Point Number		File Number	Time	Controller Location	Spread: Source Point Number At Seismometer Group For The Following Traces: IV's Tr.	IV's Tr.	III's Tr.	III's Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Near-Seis. Offset: Front	Vibrating: Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Instruments: Gains: Preamp.	Gains: Mode	Remarks Or Line
			7:40														CALLING IN BOXES
5729	NOISE FILE	430	10:30		1229	714	5151	5200				8	1	E	45	V	THERE ARE TWO OTHER SPREADS TODAY - A FOUR STATION WALKAWAY
1129		431	10:40									8	8	E	45	V	T @1200 + A FOUR-CHANNEL III SPREAD @ 1051-1070
1125		432	10:50														T
1121		433	10:59														
1117		434	11:08														WIND PICKING UP - 18-24 MPH RANGE
1113		435	11:18														
1109		SKIP															SKIP FOR HOUSE
1105		SKIP															
1101		436	11:31														
1097		437	11:42														
1093		SKIP															
1089		SKIP															
1085		438	11:55														T
1081		439	12:05														T TRACTOR TRAILER RIG 881-1050
1077		SKIP															SKIP FOR HOUSE
1073		SKIP															
1069		SKIP			1229	714	5151	5200									

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☑; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: 65-90 °F;
Trail Conditions COUNTY ROADS

Leave Town 6:55 Leave Field ____ Exprm Time ____
Arrive Field 7:24 Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. 18

Daily Summary
No Profiles 59 VPS 45
Miles Traversed ____

Total To Date For Month
No Profiles 488 VPS 292
Miles Traversed ____

Observer M. McEvoy-Bezeski Page 1 of ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 15 / 90 (Month / Day / Year)

County SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces LV's Tr.	Tr.	III's Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Mode	T=Trucks on Line
1065	SKIP				1229	914	5151	5200				8	8	E	45	V	
1061		440	12:17														
1057	SKIP																
1053		441	12:28														T
1049		442	12:37														T
1045		443	12:47														
1041	SKIP																
1037	SKIP																
1033	SKIP																
1029	SKIP																
1025	SKIP																
1021		444	1:01														
1017		445	1:10														
1013		446	1:20														
1009		447	1:29														
1005		448	1:42														
1001		449	1:51														
997		450	2:01		1229	914	5151	5200									

Remarks: (Additional remarks on back of sheet.)

SKIP FOR HOUSE

SKIP FOR PIPELINE

SKIP FOR NO PERMIT + HOUSE

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 2 of ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 15 / 90 (Month / Day / Year)

County SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr 2) No. Fold ____ ____

Distance ____ (Tr No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode (Tracks on Lins)	
993		451	2:10		1229	714	5151	5200				8	8	E	45	V	
989		452	2:19														
985		453	2:28														
981		454	2:38														
977		SKIP															
973		SKIP															
969		455	2:49														T
965		456	2:58														T
961		457	3:08														T
957		458	3:17														
953		459	3:29														
949		460	3:38														
945		461	3:48														
941		462	3:57														
937		463	4:07														T
933		464	4:16														
929		465	4:26														T
925		466	4:35		1229	714	5151	5200									

Remarks: (Additional remarks on back of sheet.)

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 3 of ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 15 / 90 (Month / Day / Year)

County SHERIDAN State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) **Seis's** ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	Mode	To Trucks or Line
921		467	4:45		1229	714	5151	5200				8	8	E	45	V	
917		468	4:54														
913		469	5:06														
909		470	5:16														
905		471	5:27									8					
901		472	5:36									7				T	#32-LEAK
897		473	5:45														
5897	NOISE FLG	474	5:48														
	E.O.R.	9999	5:49		1229	714	5151	5200									

Remarks: (Additional remarks on back of sheet.)

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 4 of ____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 16 / 90 (Month / Day / Year)

County Sheridan State Montana Line OAC 0010 No.

Spread Layout
Directions East (Increasing SP. No.), East (Tr. 1 to Tr. 2) No. Fold ____ ____
Distance Tr No. ____, ____, ____, ____ SeisGrp. Int. 50 m
No. Seis. Per Grp. 12 = 12 (Total No.) / ____ (No. Inline, No. Xline) Spacing 4.2m (Inline) / ____ (Xline)

Each Source Pattern
No. Indiv. Sources 8 (Inline) / ____ (Xline) Spacing Bumper to Bumper (Inline) / ____ (Xline)
No. Moves Per Source ____ (Inline) / ____ (Xline) Dist. Each Move ____ (Inline) / ____ (Xline)
Vibrator #18 P.W. (Model)
Sweep 10 (Frequency) To 56 Hz, 30 (Length) Drive 80%

Seis's SM-7 (Type) V (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)
Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____
Amplifiers GeoSpace GUS (Manuf.), SGR IV & III (Model), 400 (No. Channels), Samp. Int. 4/2 Ms; Rec.Lth 50/32 Sec.
Filter – (low) / – (high) Hz. IPW (low) / 2 (high) Db/Oct; 60 Hz. Rej. out (In or Out)
SGR'S 210 IVs, 50 IIIs (No. In Field) SGR Trucks 5 IVs, 2 IIIs (No. In Field)
Vibrator Electronic Pelton (Manuf.) Advance II (Model)
Reference Taper 500 ms Mode Linear % 100%
Reference Phase 0°

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces: Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset: Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains: Preamp.	MODE	T = Truck on Line
		-	7:23														
5893	Noise File	475	10:33		469			981				8	1	E	45	V	
893		Skip										8	8	E	45	V	
889		Skip															
885		476	10:48														
881		Skip															
877																	
873																	
869																	
865																	
861																	
857																	
853																	
849																	
845																	
841																	
837																	
833		Skip			469			981									

Remarks: (Additional remarks on back of sheet.)

Calling in Boxes
Inline only No Crossline
SKIP FOR PIPELINE
* VP # 5893 instead of 885 Vibs driving around
Skip for Pump Jack
No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☑; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☑; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: 55–90 °F;
Trail Conditions County Road

Leave Town 6:55 Leave Field 6:49 Exprm Time ____
Arrive Field 7:15 Arrive Town 7:15 Down Time ____
Total Travel Time ____ Number Men Rec. 18

Daily Summary
No Profiles 88 vp / 40
Miles Traversed ____

Total To Date For Month
No Profiles 576 vp / 332
Miles Traversed ____

Observer McEvoy - Zebroski

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 16 / 90 (Month / Day / Year)

County SHERIDAN State MONT. Line OAC 0010 No.

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr 2) No. Fold _____ _____

Distance _____ (Tr No.), _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep _____ (Frequency) To _____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) **Seis's** _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) **Ref. Amoco NB#** _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No. Channels), **Samp. Int.** _____ **Ms;Rec.Lth** _____ **Sec.**

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) **SGR Trucks** _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces				Perp. Offset Of Source Point	Near-Seis. Offset		Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains		
					Tr.	Tr.	Tr.	Tr.		Back	Front				Preamp.	Mode	To trucks on Line
829		Skip			469			981									
825																	
821																	
817																	
813																	
809																	
805																	
801																	
797																	
793																	
789																	
785																	
781																	
777																	
773																	
769																	
765																	
761		Skip			469			981									

Remarks: (Additional remarks on back of sheet.)

No Permit

Skip for Town of Raymond

Skip for House

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____
Observer _____

Total To Date For Month
No Profiles _____
Miles Traversed _____

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 16 / 90 (Month / Day / Year)

County Sheridan State Mont Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ____ (Increasing SP. No.), ____ (Tr. 1 to Tr. 2) No. Fold ____ ____

Distance ____ (Tr. No.), ____, ____, ____, ____ SeisGrp. Int. ____

No. Seis. Per Grp. ____ (Total No.) = ____ (No. Inline), ____ (No. Xline) Spacing ____ (Inline), ____ (Xline)

Each Source Pattern

No. Indiv. Sources ____ (Inline), ____ (Xline) Spacing ____ (Inline), ____ (Xline)

No. Moves Per Source ____ (Inline), ____ (Xline) Dist. Each Move ____ (Inline), ____ (Xline)

Vibrator ____ (Model)

Sweep ____ (Frequency) To ____ Hz, ____ (Length) Drive ____

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Seis's ____ (Type) ____ (Comp.) ____ (Direction)

Seis's ____ (Type) ____ (Comp.) ____ (Direction) Ref. Amoco NB# ____ pg. ____

Amplifiers ____ (Manuf.), ____ (Model), ____ (No. Channels), Samp. Int. ____ Ms; Rec.Lth ____ Sec.

Filter ____ (low) / ____ (high) Hz. ____ (low) / ____ (high) Db/Oct; 60 Hz. Rej. ____ (In or Out)

SGR'S ____ (No. In Field) SGR Trucks ____ (No. In Field)

Vibrator Electronic ____ (Manuf.) ____ (Model)

Reference Taper ____ Mode ____ % ____

Reference Phase ____

General				Spread								Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces IVs Tr.	IVs Tr.	IIIs Tr.	IIIs Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains Mode	T=Truck on Line
757		Skip			469	981	5101	5150									
753																	
749																	
745																	
741																	
737		Skip															
733		477	11:52									8	8	E	45	V	
729		478	12:02														
725		479	12:12														
721		480	12:21														
717		481	12:31														
713		482	12:40														
709		483	12:50														
705		484	12:59														
701		485	1:08														
697		486	1:18														
693		487	1:27														
689		488	1:36		469	981	5101	5150									

Remarks: (Additional remarks on back of sheet.)

Skip for Howes

* Crossline spread is live Now Vibs stacking in 1st Position

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: ____ °F;
Trail Conditions ____

Leave Town ____ Leave Field ____ Exprm Time ____
Arrive Field ____ Arrive Town ____ Down Time ____
Total Travel Time ____ Number Men Rec. ____

Daily Summary
No Profiles ____
Miles Traversed ____

Total To Date For Month
No Profiles ____
Miles Traversed ____

Observer ____ Page 3 of 5

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 16 / 90 (Month Day Year)

County Sheridan State MONT. Line ____ (OAC) 0010 (No.)

Spread Layout

Directions ______ (Increasing SP. No.), ______ (Tr. 1 to Tr. 2) No. Fold ______ ______

Distance (Tr. No.) ______, ______, ______, ______ SeisGrp. Int. ______

No. Seis. Per Grp. ______ (Total No.) = ______ (No. Inline), ______ (No. Xline) Spacing ______ (Inline), ______ (Xline)

Each Source Pattern

No. Indiv. Sources ______ (Inline), ______ (Xline) Spacing ______ (Inline), ______ (Xline)

No. Moves Per Source ______ (Inline), ______ (Xline) Dist. Each Move ______ (Inline), ______ (Xline)

Vibrator ______ (Model)

Sweep ____ To ____ Hz, (Frequency) ______ (Length) Drive ______

Seis's ______ (Type) ______ (Comp.) ______ (Direction) Seis's ______ (Type) ______ (Comp.) ______ (Direction)

Seis's ______ (Type) ______ (Comp.) ______ (Direction) Ref. Amoco NB# ______ pg. ______

Amplifiers ______ (Manuf.), ______ (Model), ______ (No. Channels), Samp. Int. ______ Ms; Rec.Lth ______ Sec.

Filter ______ (low) / ______ (high) Hz. ______ (low) / ______ (high) Db/Oct; 60 Hz. Rej. ______ (In or Out)

SGR'S ______ (No. In Field) SGR Trucks ______ (No. In Field)

Vibrator Electronic ______ (Manuf.) ______ (Model)

Reference Taper ______ Mode ______ % ______

Reference Phase ______

General				Spread								Vibrating			Instruments			
					Source Point Number At Seismometer Group For The Following Traces IIIs IIIs					Near-Seis. Offset					Gains			
Source Point Number		File Number	Time	Controller Location	Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Back	Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Preamp.	MODE	T=Truck on Line	Remarks: (Additional remarks on back of sheet.)
685		489	1:48		469	981	5101	5150				8	8	E	45	V		
681		490	1:57															
677		491	2:07															Pause to Air up Airbags
673		492	2:25									8						
669		493	2:42									7						Vib # 74 Broken Pad chains
665		494	2:51															
661		495	3:00															
657		496	3:10															
653		497	3:19															
649		498	3:29															
645		499	3:39															
641		500	3:48															
637		501	4:01															
633		502	4:10														T	
629		503	4:20									7					T	
625		504	4:30									8						
621		505	4:42									8						
617		506	4:51		469	981	5101	5150				8						

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0–12 MPH) ☐; (13–24 MPH) ☐; (25–40 MPH) ☐;
Temperature: ______ °F;
Trail Conditions ______

Leave Town ______ Leave Field ______ Exprm Time ______
Arrive Field ______ Arrive Town ______ Down Time ______
Total Travel Time ______ Number Men Rec. ______

Daily Summary
No Profiles ______
Miles Traversed ______

Total To Date For Month
No Profiles ______
Miles Traversed ______

Observer ______ Page 4 of 5

Amoco Production Company

Seismic Observers Form

Party 045 Date 8 / 16 / 90 (Month / Day / Year)

County Sheridan State Mont. Line (OAC) 0017 (No.)

Spread Layout

Directions _____ (Increasing SP. No.), _____ (Tr. 1 to Tr. 2) No. Fold _____ _____

Distance (Tr No.) _____, _____, _____, _____ SeisGrp. Int. _____

No. Seis. Per Grp. _____ (Total No.) = _____ (No. Inline), _____ (No. Xline) Spacing _____ (Inline), _____ (Xline)

Each Source Pattern

No. Indiv. Sources _____ (Inline), _____ (Xline) Spacing _____ (Inline), _____ (Xline)

No. Moves Per Source _____ (Inline), _____ (Xline) Dist. Each Move _____ (Inline), _____ (Xline)

Vibrator _____ (Model)

Sweep ____ (Frequency) To ____ Hz, _____ (Length) Drive _____

Seis's _____ (Type) _____ (Comp.) _____ (Direction) **Seis's** _____ (Type) _____ (Comp.) _____ (Direction)

Seis's _____ (Type) _____ (Comp.) _____ (Direction) **Ref. Amoco NB#** _____ pg. _____

Amplifiers _____ (Manuf.), _____ (Model), _____ (No. Channels), Samp. Int. _____ Ms; Rec.Lth. _____ Sec.

Filter _____ (low) / _____ (high) Hz. _____ (low) / _____ (high) Db/Oct; 60 Hz. Rej. _____ (In or Out)

SGR'S _____ (No. In Field) **SGR Trucks** _____ (No. In Field)

Vibrator Electronic _____ (Manuf.) _____ (Model)

Reference Taper _____ Mode _____ % _____

Reference Phase _____

General				Spread							Vibrating			Instruments		
Source Point Number		File Number	Time	Controller Location	Source Point Number At Seismometer Group For The Following Traces IV's III's Tr.	Tr.	Tr.	Tr.	Perp. Offset Of Source Point	Near-Seis. Offset Back	Near-Seis. Offset Front	Number Of Vibrators	Number Of Sweeps	Vibrator Heading	Gains Preamp.	Gains MODE	T=Truck or Line
613		507	5:04		469	981	5101	5150				7	8	E	45	V	T
609		508	5:14									8					T
605		509	5:24									7					
601		510	5:33														
597		511	5:42														
593		512	5:52														
589		513	6:01									7					
585		514	6:12									8					
581		Skip															
577																	
573																	
569																	
565																	
561																	
557																	
553		Skip															
549		515	6:31									8	8	E	45	V	
5549	Noise Fik	516	6:33		469	981	5101	5150				8	1	E	45	V	

Remarks: (Additional remarks on back of sheet.)

Last vib out too steep - All Vibs stacking in 4th position.

Wind picking up 13-24 mph

Vib #83 Electronics Problem

No Permit

Note: Use separate line for each record. Make original and copy. Send original to district geophysicist. Use separate sheet for each seismic line.

Weather:
Dry Ground ☐; Wet ☐; Rain ☐; Snow ☐; Lightning ☐;
Wind:
(0-12 MPH) ☐; (13-24 MPH) ☐; (25-40 MPH) ☐;
Temperature: _____ °F;
Trail Conditions _____

Leave Town _____ Leave Field _____ Exprm Time _____
Arrive Field _____ Arrive Town _____ Down Time _____
Total Travel Time _____ Number Men Rec. _____

Daily Summary
No Profiles _____
Miles Traversed _____
Observer _____

Total To Date For Month
No Profiles _____
Miles Traversed _____