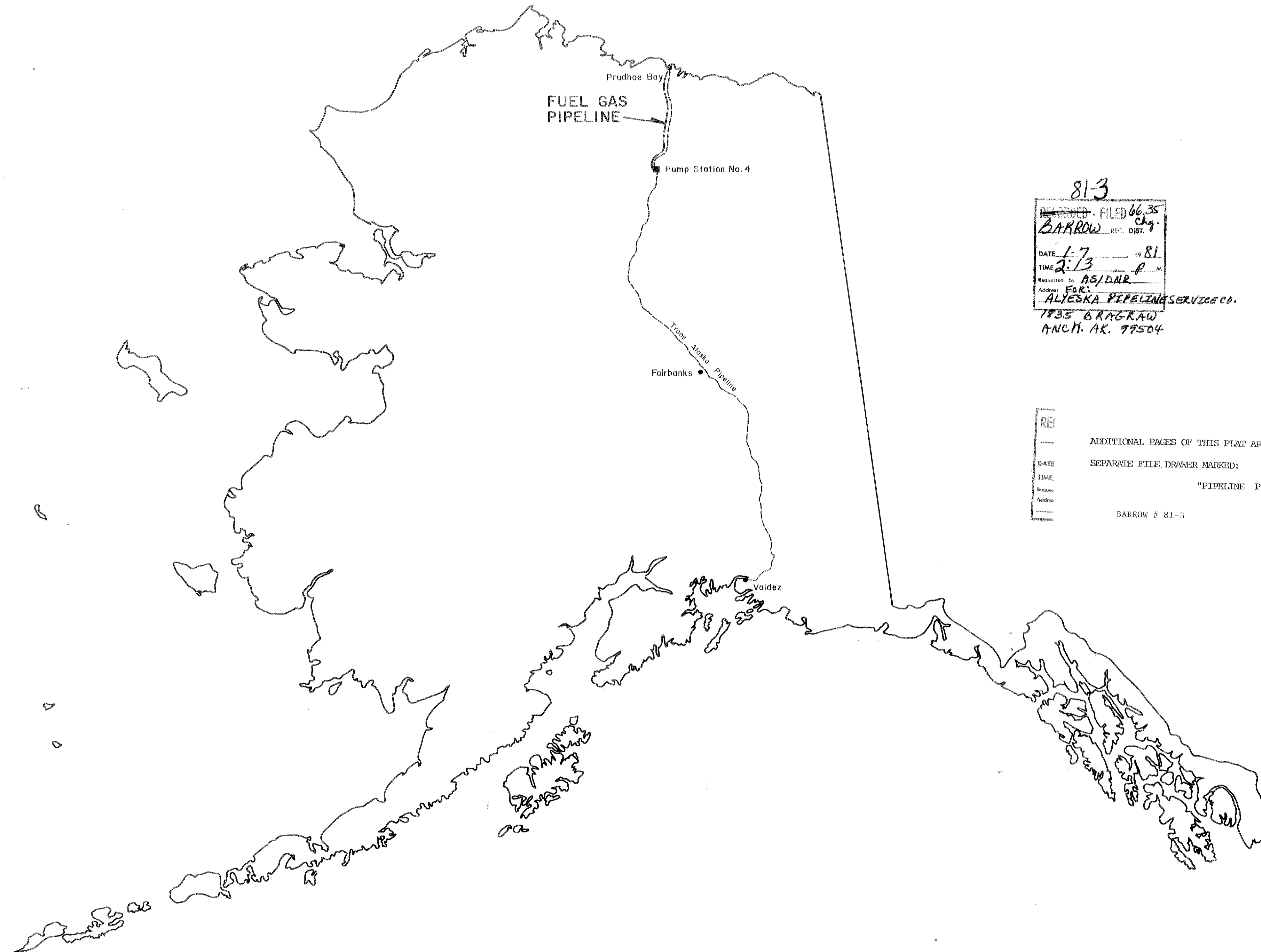


FUEL GAS PIPELINE MONUMENTATION SURVEY



81-3

RECORDED - FILED 66.35
 BARROW REC. DIST. chg.

DATE 1-7 19 81
 TIME 2:13 P.M.

Requested by AS/DNR
 Address FOR:
 ALYESKA PIPELINE SERVICES CO.
 1835 BRAGRAW
 ANCH. AK. 99504

~~RECORDED - FILED~~
 REC. DIST.

DATE _____ 19 ____
 TIME _____ P.M.

Requested by _____
 Address _____

REI

ADDITIONAL PAGES OF THIS PLAT ARE IN A
 SEPARATE FILE DRAWER MARKED:
 "PIPELINE PLATS"

BARROW # 81-3

PREPARED BY:
BOMHOFF & ASSOCIATES, INC.
 ANCHORAGE, ALASKA

Alyeska pipeline

SERVICE COMPANY

AGENT FOR:

- AMERADA HESS PIPELINE CORPORATION
- ARCO PIPELINE COMPANY
- BP PIPELINES INC.
- EXXON PIPELINE COMPANY
- MOBIL ALASKA PIPELINE COMPANY
- PHILLIPS ALASKA PIPELINE COMPANY
- SOHIO PIPELINE COMPANY
- UNION ALASKA PIPELINE COMPANY

FUEL GAS PIPELINE MONUMENTATION SURVEY

SUMMARY OF SURVEY

FIELD SURVEYS FOR THE PROJECT WERE ACCOMPLISHED DURING AUGUST, 1979, WITH THE PLATTING AND OFFICE WORK BEING COMPLETED DURING SEPTEMBER, 1979. TOTAL LENGTH OF PROJECT IS APPROXIMATELY 112 MILES. TOTAL BELOW GROUND ANGLE POINTS 366, PLUS NUMEROUS LINE INTERSECTIONS, CREEK CROSSINGS, AND LINE MONUMENTS (P.O.T.'S). THE PIPELINE, AS CONSTRUCTED, CONSISTS OF BELOW GROUND SECTIONS OF 8" AND 10" DIAMETER PIPE.

THE PIPELINE CENTERLINE AS CONSTRUCTED WAS TRAVERSED USING THEODOLITES AND ELECTRONIC DISTANCE MEASURING EQUIPMENT. THE SURVEY CONFORMS TO THE CRITERIA AS ESTABLISHED FOR THIRD-ORDER ACCURACY. TIES WERE MADE TO THE 48" TRANS ALASKA PIPELINE APPROXIMATELY EVERY TEN MILES. THE TRAVERSE WAS THEN ADJUSTED AND BALANCED; COORINATES FOR THE ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4 WERE THEN COMPUTED FOR THE ANGLE POINTS. THIS INFORMATION WAS CONVERTED TO GEOGRAPHIC POSITIONS, TRUE MEAN BEARINGS AND TRUE DISTANCES. THE TRUE MEAN BEARINGS AND TRUE DISTANCES ARE LISTED ON THE INDIVIDUAL SHEETS UNDER FUEL GAS PIPELINE SCHEDULE. THE SHEETS ARE NUMBERED BEGINNING AT MILEPOST 19 OF THE 48 INCH TRANS ALASKA PIPELINE WITH SHEET NO. 1, THENCE WITH THE DIRECTION OF FLOW, SOUTHERLY TO NEAR PUMP STATION 4, WITH SHEET NO. 22.

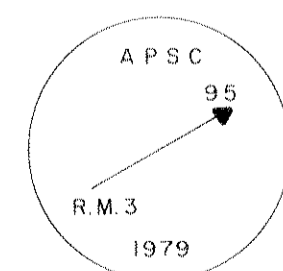
THE FUEL GAS PIPELINE IS ADJACENT TO THE 48 INCH TRANS ALASKA PIPELINE BETWEEN MILEPOST 89.5 AND 102.0. THIS SECTION IS COVERED IN THE 48 INCH TRANS ALASKA PIPELINE MONUMENTATION SURVEY.

THE ACTUAL CENTERLINE OF THE FUEL GAS PIPELINE WAS NOT MONUMENTED. FOR SAFETY REASONS SURVEYORS AVOIDED DRIVING MONUMENTATION RODS OVER THE TOP OF OR IN THE CLOSE PROXIMITY TO THE BURIED PIPELINE. THE MONUMENTATION THAT WOULD HAVE BEEN NORMALLY SET, IS OBTAINABLE BY A SYSTEM OF REFERENCE MONUMENTS SET OFF THE PIPELINE CENTERLINE.

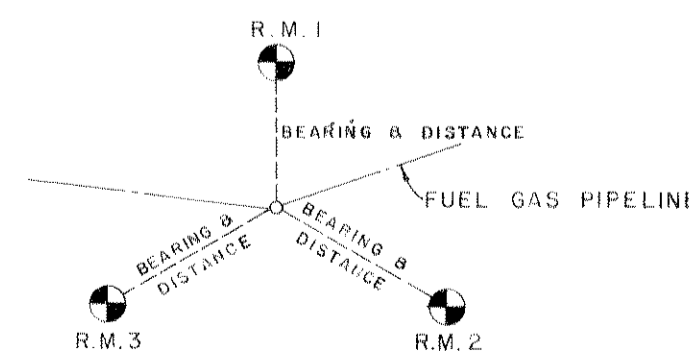
THE FUEL GAS PIPELINE WAS REFERENCED APPROXIMATELY EVERY MILE USING THREE ALUMINUM MONUMENTS. THESE MONUMENTS CONSISTED OF 3-1/2" DIAMETER ALUMINUM CAPS, ON TOP OF A 5/8 INCH ALUMINUM ROD DRIVEN APPROXIMATELY EIGHT FEET DEEP. TRUE BEARINGS AND HORIZONTAL DISTANCES ARE LISTED FOR EACH REFERENCE MONUMENT. SEE DETAILS BELOW.

GENERAL NOTES

1. ALL BEARINGS SHOWN ARE TRUE MEAN. ALL DISTANCES ARE TRUE SEA LEVEL.
2. DISTANCES AND BEARINGS AS SHOWN IN SCHEDULE ARE FROM ANGLE POINT TO ANGLE POINT.
3. BEARINGS AND DISTANCES SHOWN FOR ALL TIES ARE TRUE MEAN AND USE THE PIPELINE CENTERLINE SURVEY FOR THEIR ORIGIN.

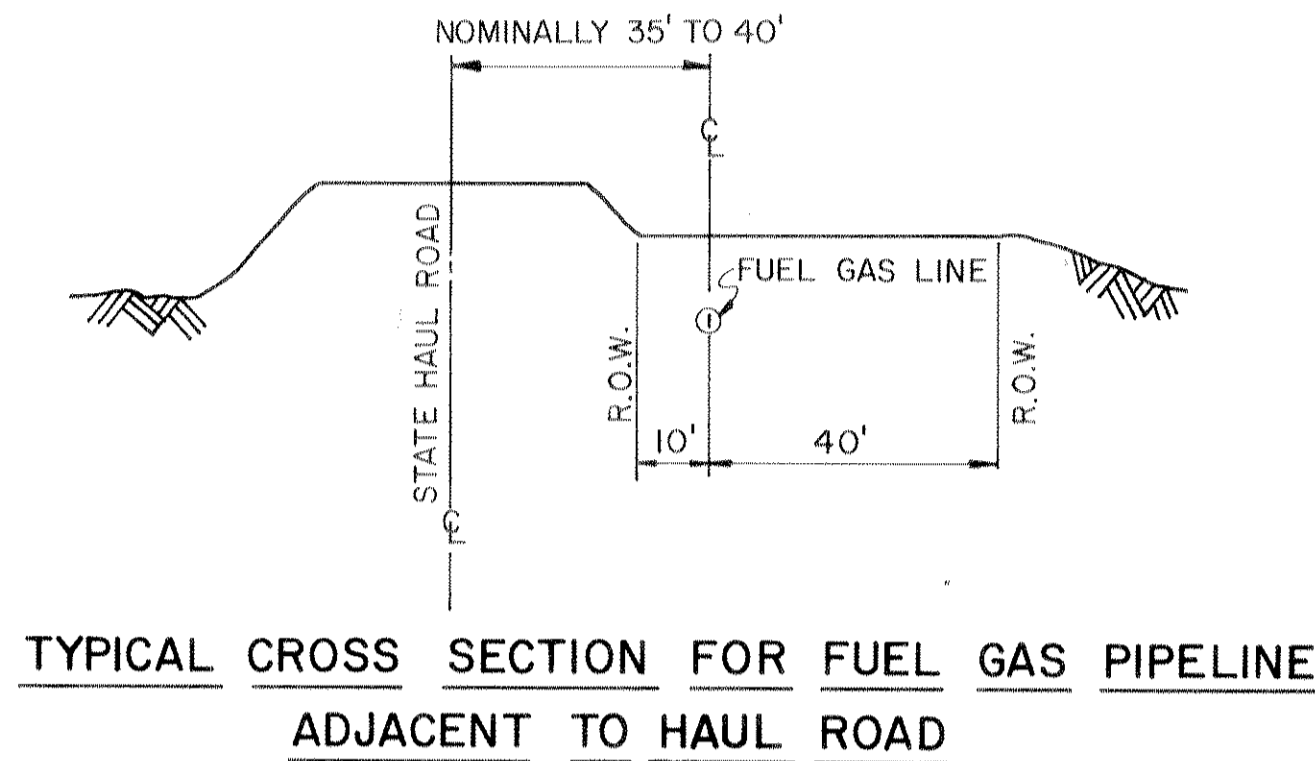


TYPICAL MONUMENT MARKING

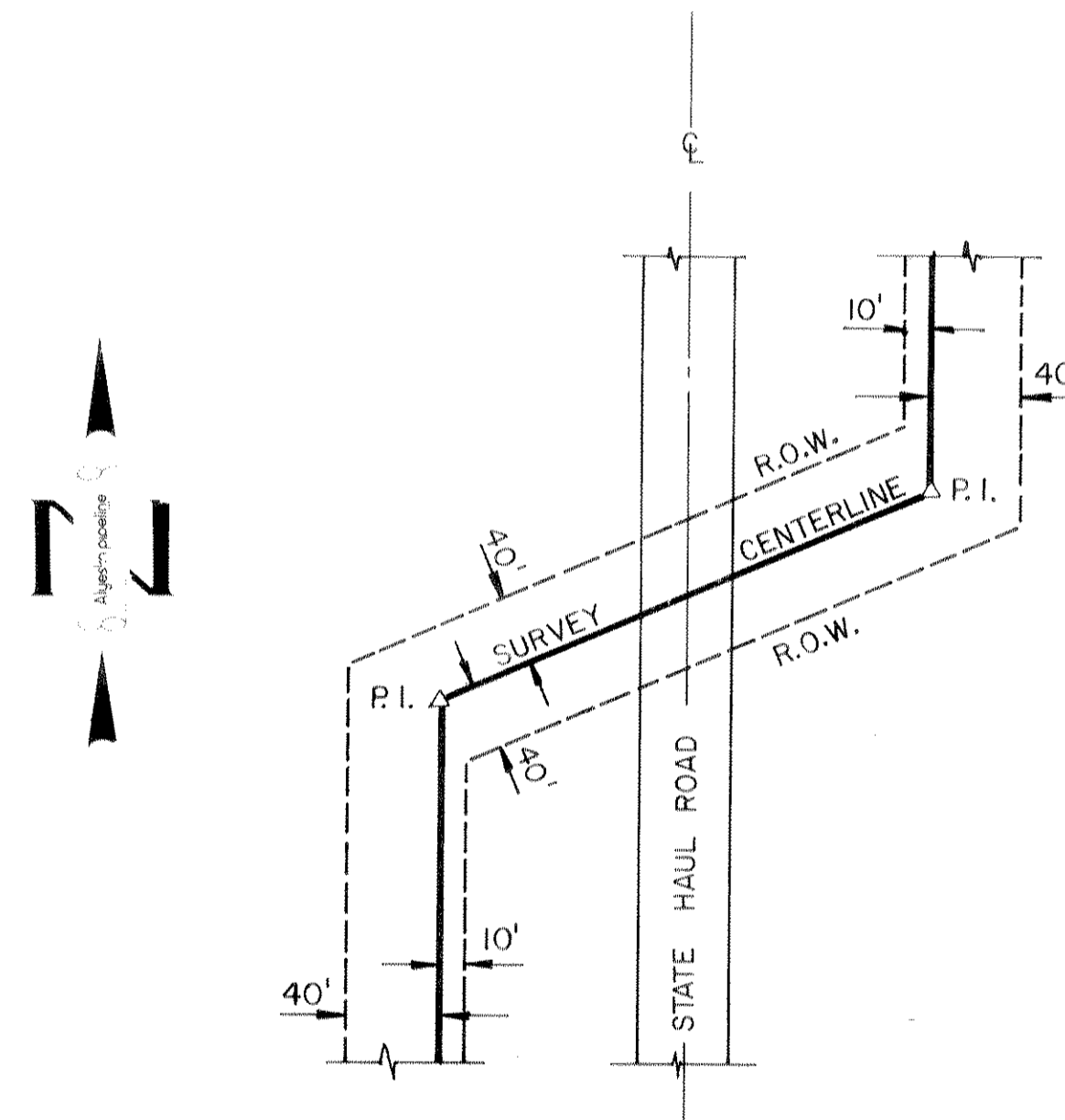


TYPICAL REFERENCE MONUMENTATION DETAILS

FOR COMPLETE REFERENCE MONUMENTATION DETAILS SEE BEARING AND DISTANCE AND REFERENCE POINT SCHEDULE COMPUTER PRINTOUT BOOK (1979).



TYPICAL CROSS SECTION FOR FUEL GAS PIPELINE ADJACENT TO HAUL ROAD



TYPICAL PLAN VIEW SHOWING PERMANENT RIGHT-OF-WAY FOR THE ALYESKA FUEL GAS LINE ADJACENT TO THE EAST SIDE OF THE STATE HAUL ROAD. CROSSING THE STATE HAUL ROAD AND ADJACENT TO THE WEST SIDE OF THE STATE HAUL ROAD, RIGHT-OF-WAY MODIFICATIONS AT VALVE SITE LOCATIONS ARE SHOWN AS DETAIL INSERTS TO THE DRAWINGS. FOR ALL FUEL GAS LINE CURVES WITH AN EXTERNAL DISTANCE OF FOUR FEET OR MORE, THE PERMANENT RIGHT-OF-WAY WILL FOLLOW THE CURVE DATA LISTED AT THE TOP OF EACH SHEET ADJACENT TO THE POINT I.D. NUMBER.

ENGINEER'S STATEMENT

J. C. HARLE STATES THAT HE IS BY OCCUPATION THE ENGINEERING MANAGER EMPLOYED BY ALYESKA PIPELINE SERVICE COMPANY, AGENT FOR THE PERMITTEES UNDER THOSE CERTAIN GRANTS OF RIGHT-OF-WAY FOR THE FUEL GAS PIPELINE, TO MAKE A SURVEY THEREOF AS DESCRIBED AND SHOWN ON THE MAPS THEREFORE ATTACHED TO THIS CERTIFICATE; THAT THE SURVEY FOR SAID FUEL GAS PIPELINE WAS MADE UNDER HIS SUPERVISION AND AUTHORITY DURING A PERIOD COMMENCING 8/3/79 AND ENDING 8/19/79; AND THAT SUCH SURVEY IS ACCURATELY REPRESENTED ON THE MAP THEREFOR ATTACHED HERETO.

J. C. Harle 10/9/79
ENGINEERING MANAGER

PERMITTEE'S CERTIFICATE

THIS IS TO CERTIFY THAT J. C. HARLE, WHO SUBSCRIBED THE ENGINEER'S STATEMENT HEREON, IS THE PERSON EMPLOYED BY THE PERMITTEE'S BELOW LISTED TO PREPARE THE MAPS ATTACHED TO THIS CERTIFICATE, WHICH REPRESENT THE FINAL LOCATION OF THE FUEL GAS PIPELINE, AND THAT THESE MAPS ARE FILED AS REQUIRED IN CONNECTION WITH RIGHTS-OF-WAY ISSUED UNDER 43 U.S.C. 1651 ET SEQ.; AND I FURTHER CERTIFY THAT SAID RIGHT-OF-WAY IS REQUIRED FOR THE OPERATION AND MAINTENANCE OF THE FUEL GAS PIPELINE SYSTEM.

AMERADA HESS PIPELINE CORPORATION
ARCO PIPE LINE COMPANY
BP PIPELINES INC.
EXXON PIPELINE COMPANY
MOBIL ALASKA PIPELINE COMPANY
PHILLIPS ALASKA PIPELINE CORPORATION
SHELL PIPE LINE COMPANY
UNION ALASKA PIPELINE COMPANY

BY: ALYESKA PIPELINE SERVICE COMPANY
AGENT FOR PERMITTEE'S

W. M. Witten
W. M. WITTEN
VICE - PRESIDENT

ATTEST: *H. G. Brelsford*
H. G. BRELSFORD
ASSISTANT SECRETARY

81-3
6635 chg.
RECORDED - FILED
DATE 1-7 1981
TIME 2:13 P
Requested by AS/DNR
FOR: ALYESKA PIPELINE SERVICE Co.

RECORDED - FILED
REC. DIST.
DATE _____ 19__
TIME _____ M
Requested by _____
Address _____

RECORDED - FILED
REC. DIST.
DATE _____ 19__
TIME _____ M
Requested by _____
Address _____

RECORDED - FILED
REC. DIST.
DATE _____ 19__
TIME _____ M
Requested by _____
Address _____

SURVEYOR'S CERTIFICATE

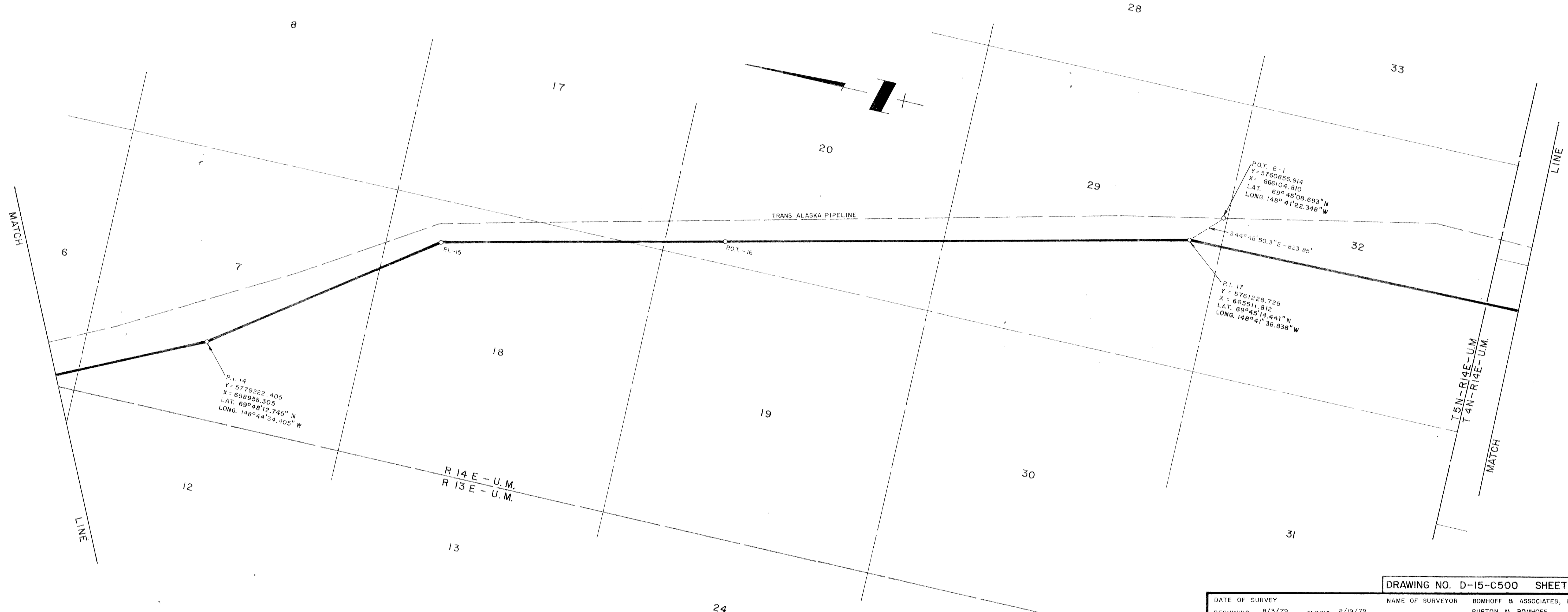
I HEREBY CERTIFY THAT I AM REGISTERED TO PRACTICE LAND SURVEYING IN ALASKA AND THAT THIS PLAN REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THE MONUMENTS SHOWN THEREON ACTUALLY EXIST AS LOCATED, AND THAT ALL DIMENSIONAL AND OTHER DETAILS ARE CORRECT.

B. M. Somloff
REGISTERED LAND SURVEYOR
September 26, 1979
DATE



POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR									
	RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD							
13	2000'	402.57'	789.30'																															
	S25°24'41"E - 4016.63'																																	
14	5700'	522.89'	1041.40'																															
	S35°52'37"E - 4919.91'																																	
15	2860'	575.61'	1128.59'																															
	S13°06'04"E - 7606.99'																																	
16																																		
	S13°05'21"E - 6912.64'																																	
17	2680'	284.17'	565.17'																															
	S00°58'49"E - 8743.45'																																	
18	1616.40'	380.01'	739.85'																															
	S00°58'49"E - 8743.45'																																	

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



DRAWING NO. D-15-C500 SHEET 4 OF 22

DATE OF SURVEY 8/3/79 NAME OF SURVEYOR BOMHOFF & ASSOCIATES, INC.
 BEGINNING 8/3/79 ENDING 8/19/79 BURTON M. BOMHOFF LIC. NO. 3087-S
 DRAWN BY C. L. F. APPROVED B. M. B. SCALE 1" = 1000'

DESCRIPTION
A PORTION OF THE FUEL GAS PIPELINE
 WITHIN
 T4N, R14E, & T5N, R14E, U.M.

UNITED STATES DEPARTMENT OF THE INTERIOR
 STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
 ANCHORAGE, ALASKA

APPROVAL RECOMMENDED
 NAME _____
 TITLE Chief, Division of Cadastral Survey
 Bureau of Land Management

APPROVED
 NAME _____
 TITLE Authorized Officer

FILE NO. _____

AGENT
ALYESKA PIPELINE SERVICE CO.
 FUEL GAS PIPELINE

PUMP STATION NO. 1
 TO
 PUMP STATION NO. 4

APPROVAL RECOMMENDED *[Signature]*

APPROVAL *[Signature]*

NO.	DATE	REVISION	BY	CHKD	APP	APPROVAL

RECORDED - FILED
 REC. DIST. _____
 DATE _____ 19__
 TIME _____
 Requested by _____
 Address _____

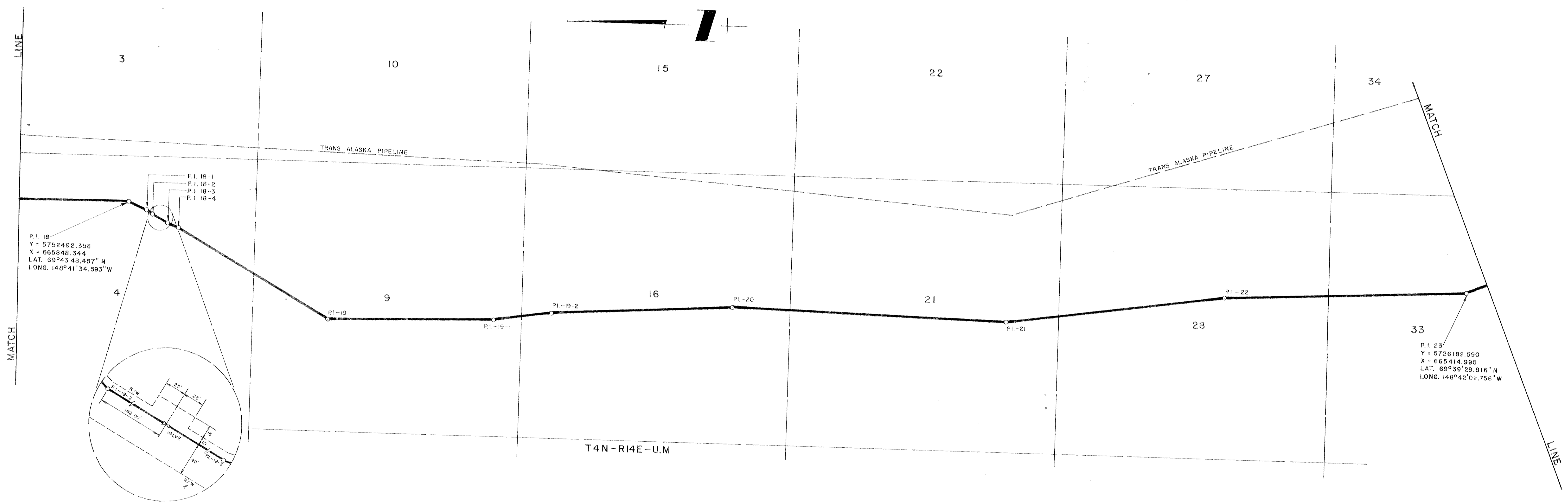
81-3
 RECORDED - FILED *66.25*
BARRDW REC. DIST. _____
 DATE 1-7 19 81
 TIME 2:13 P.
 Requested by A.S./DLR
 FOR: ALYESKA
 PIPELINE SERVICE
 Co.

RECORDED - FILED
 REC. DIST. _____
 DATE _____ 19__
 TIME _____
 Requested by _____
 Address _____

RECORDED - FILED
 REC. DIST. _____
 DATE _____ 19__
 TIME _____
 Requested by _____
 Address _____

POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE		
	RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD
17	2680'	284.17'	565.17'	19-2	7200'	295.11'	589.72'																
	S00°58'49"E	8743.45'			S03°38'50"E	3560.51'																	
18	1616.40'	380.01'	739.85'	20	5800'	243.65'	486.87'																
	S25°28'46"W	380.01'			S01°09'51"W	5405.28'																	
18-1				21	5350'	425.24'	847.80'																
	S33°56'08"W	152.85'			S07°55'24"E	4265.09'																	
18-2				22	5500'	245.94'	491.39'																
	S29°32'57"W	341.50'			S02°47'59"E	4745.62'																	
18-3				23	3010'	510.61'	1006.83'																
	S21°34'00"W	236.20'			S22°02'40"E	7332.39'																	
18-4				24																			
	S29°36'57"W	3440.62'																					
19	2020'	570.71'	1098.43'																				
	S01°56'37"E	3264.21'																					
19-1	4500'	251.60'	502.41'																				
	S08°20'34"E	1146.62'																					

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



DRAWING NO. D-15-C500 SHEET 5 OF 22

DATE OF SURVEY BEGINNING 8/3/79 DRAWN BY C.L.F.	NAME OF SURVEYOR ENDING 8/19/79 APPROVED B.M.B.	BOMHOFF & ASSOCIATES, INC. BURTON M. BOMHOFF LIC. NO. 3087-S	SCALE 1" = 1000'
A PORTION OF THE FUEL GAS PIPELINE WITHIN T4N, R14E, U.M.			
UNITED STATES DEPARTMENT OF THE INTERIOR		STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES ANCHORAGE, ALASKA	
APPROVAL RECOMMENDED NAME TITLE Chief, Division of Cadastral Survey Bureau of Land Management		APPROVAL RECOMMENDED NAME <i>Ed Best</i> 10/29/80 TITLE Chief Cadastral Surveyor	
APPROVED NAME TITLE Authorized Officer		APPROVED NAME <i>John M. ...</i> 10/29/80 TITLE Authorized Officer	
FILE NO.		FILE NO. 103-1	

RECORDED - FILED
REC. DIST.
DATE 19__
TIME
Requested by
Address

81-3
RECORDED - FILED 66.85
BARRROW REC. DIST.
DATE 1-7 19 81
TIME 2:13
Requested by AS/DNR
Address FOR: ALYESKA PIPELINE SERVICE CO.

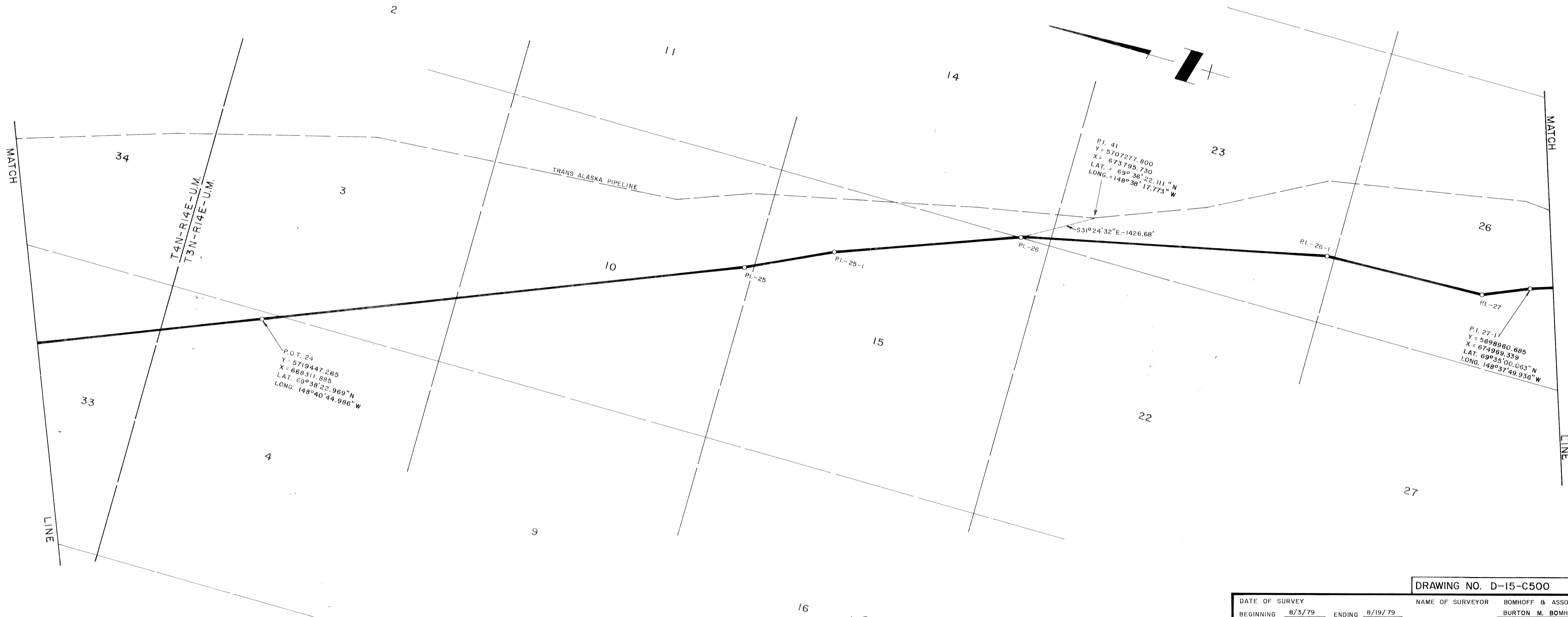
RECORDED - FILED
REC. DIST.
DATE 19__
TIME
Requested by
Address

RECORDED - FILED
REC. DIST.
DATE 19__
TIME
Requested by
Address

AGENT ALYESKA PIPELINE SERVICE CO.	
FUEL GAS PIPELINE	
PUMP STATION NO. 1 TO PUMP STATION NO. 4	
APPROVAL RECOMMENDED	<i>J.C. Harle</i>
APPROVED	<i>J.C. Harle</i>
NO.	DATE
ER #	ORIGINAL ISSUE
BY	CHKD APP

POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE		
	RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD
23	3010	510.61	1006.83'	28																															
	S22°02'40"E		7332.39'																																
24																																			
	S22°01'31"E		6664.14'																																
25	4900'	146.22'	292.31'																																
	S25°25'55"E		1711.99'																																
25-1	5200'	232.50'	464.53'																																
	S20°18'17"E		3567.90'																																
26	5120'	352.17'	702.67'																																
	S12°25'34"E		5778.86'																																
26-1	5700'	503.66'	1003.41'																																
	S02°19'20"E		3063.90'																																
27	2935'	536.95'	1056.37'																																
	S23°03'17"E		928.74'																																
27-1																																			
	S18°11'45"E		3819.63'																																

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



DRAWING NO. D-15-C500 SHEET 6 OF 22

DATE OF SURVEY 8/3/79 ENDING 8/19/79 NAME OF SURVEYOR BOMHOFF & ASSOCIATES, INC.
 BEGINNING 8/3/79 ENDING 8/19/79 BURTON M. BOMHOFF LIC. NO. 3087-S
 DRAWN BY C.L.F. APPROVED B.M.B. SCALE 1" = 1000'

DESCRIPTION
A PORTION OF THE FUEL GAS PIPELINE
 WITHIN
T3N,R14E, & T4N,R14E, U.M.

UNITED STATES DEPARTMENT OF THE INTERIOR STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
 ANCHORAGE, ALASKA

APPROVAL RECOMMENDED NAME _____ TITLE Chief, Division of Cadastral Survey Bureau of Land Management
 APPROVAL RECOMMENDED NAME *MS Bent* 10/29/80 TITLE Chief Cadastral Surveyor

APPROVED NAME _____ TITLE _____
 APPROVED NAME *Arthur Sch...* 10/29/80 TITLE Authorized Officer

FILE NO. _____ FILE NO. 103-1

RECORDED - FILED REC. DIST. _____
 DATE _____ 19___
 TIME _____
 Requested by _____
 Address _____

RECORDED - FILED REC. DIST. _____
 DATE _____ 19___
 TIME _____
 Requested by _____
 Address _____

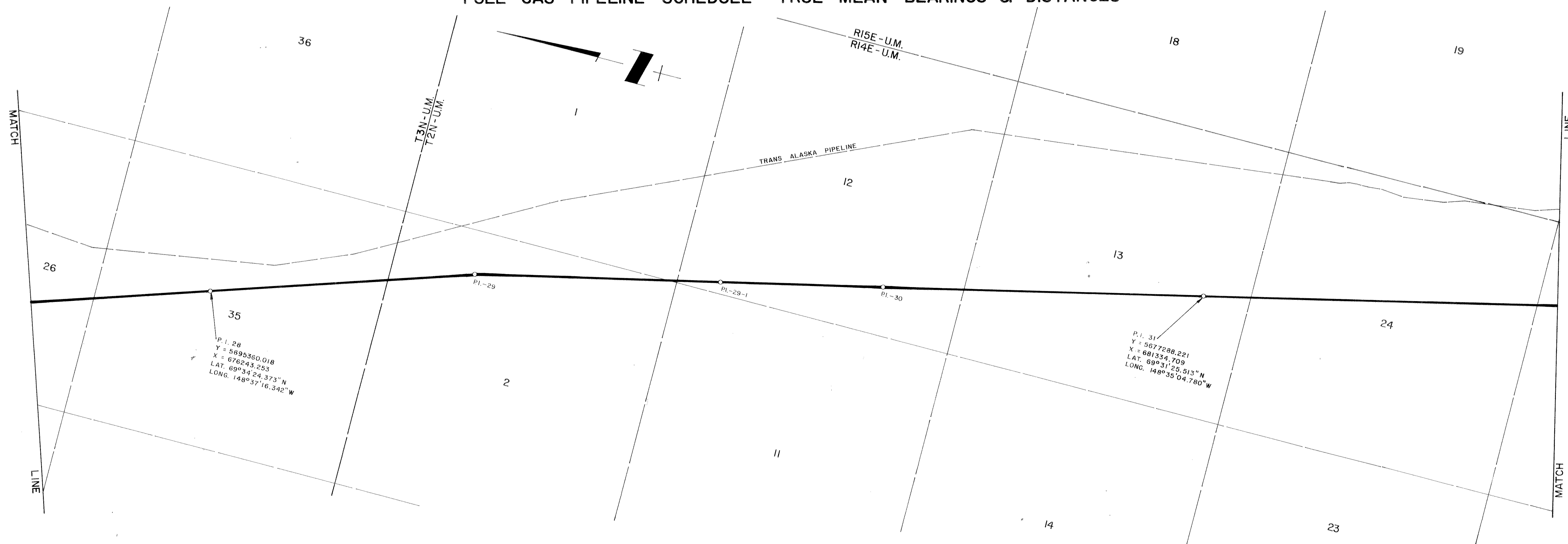
RECORDED - FILED REC. DIST. _____
 DATE _____ 19___
 TIME _____
 Requested by _____
 Address _____

81-3
 RECORDED - FILED 66-35
 BARROW REC. DIST. _____
 DATE 1-7 19 81
 TIME 2:13
 Requested by *AS/DHR*
 Address *FOR: ALYESKA PIPELINE SERVICE Co.*

AGENT ALYESKA PIPELINE SERVICE CO.		APPROVAL RECOMMENDED <i>MS Bent</i>	
FUEL GAS PIPELINE		APPROVED <i>Arthur Sch...</i>	
PUMP STATION NO. 1 TO PUMP STATION NO. 4		FILE NO. _____	
APPROVAL RECOMMENDED <i>MS Bent</i>		FILE NO. 103-1	
NO.	DATE	REVISION	BY
			<i>J.C. Harte</i>

POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE			POINT I. D.	BEARING & DISTANCE		
	RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD				
27-1																															
	S18°11'45"E-		3819.63'																												
28	S18°09'32"E-		5014.96'																												
29	4310'	194.03'	387.67'																												
	S12°59'39"E-		4656.97'																												
29-1																															
	S13°08'08"E-		3062.28'																												
30																															
	S13°05'06"E-		6056.73'																												
31																															
	S13°02'21"E-		7477.15'																												
32																															

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



DRAWING NO. D-15-C500 SHEET 7 OF 22

DATE OF SURVEY 8/3/79 ENDING 8/19/79 NAME OF SURVEYOR BOMHOFF & ASSOCIATES, INC. BURTON M. BOMHOFF LIC. NO. 3087-S
 DRAWN BY C.L.F. APPROVED B.M.B. SCALE 1" = 1000'

DESCRIPTION
A PORTION OF THE FUEL GAS PIPELINE
 WITHIN
 T2N, R14E, & T3N, R14E, U.M.

UNITED STATES
 DEPARTMENT OF THE INTERIOR

STATE OF ALASKA
 DEPARTMENT OF NATURAL RESOURCES
 ANCHORAGE, ALASKA

APPROVAL RECOMMENDED
 NAME
 TITLE Chief, Division of Cadastral Survey
 Bureau of Land Management

APPROVAL RECOMMENDED
 NAME *[Signature]* 10/24/80
 TITLE Chief Cadastral Surveyor

APPROVED
 NAME
 TITLE Authorized Officer

APPROVED
 NAME *[Signature]* 10/24/80
 TITLE Authorized Officer

FILE NO. FILE NO. 103-1

RECORDED - FILED
 REC. DIST.
 DATE 19
 TIME
 Requested by
 Address

81-3
 RECORDED - FILED 66.35
 BARROW REC. DIST.
 DATE 1-7-81
 TIME 2:13 P.M.
 Requested by AS/DNR
 FOR: ALYESKA PIPELINE SERVICE CO.

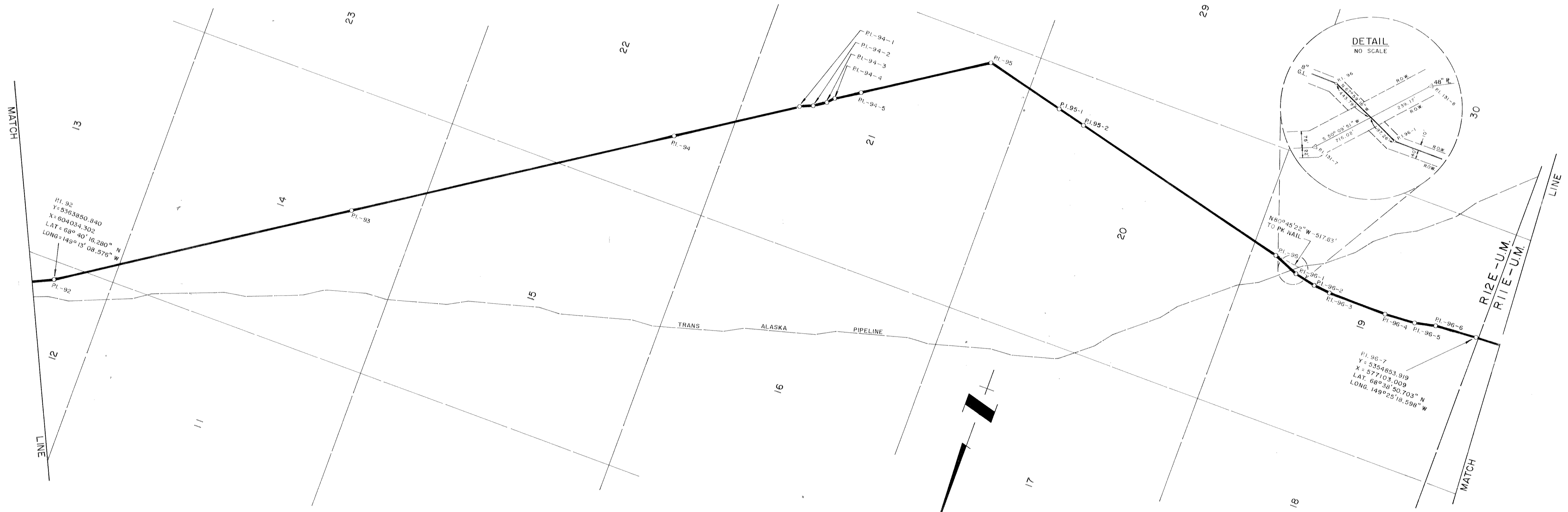
RECORDED - FILED
 REC. DIST.
 DATE 19
 TIME
 Requested by
 Address

RECORDED - FILED
 REC. DIST.
 DATE 19
 TIME
 Requested by
 Address

NO.	DATE	REVISION	BY	CHKD	APP	APPROVAL
						AGENT ALYESKA PIPELINE SERVICE CO. FUEL GAS PIPELINE PUMP STATION NO. 1 TO PUMP STATION NO. 4 APPROVAL RECOMMENDED <i>[Signature]</i> APPROVAL <i>[Signature]</i>

POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR			POINT I. D.	BEARING & DISTANCE OR				
	RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD		RADIUS	TANGENT	L. CHORD	RADIUS	TANGENT
91				94-5	S56°52'19"W	2626.48'		96-4	S85°58'49"W	610.59'																											
	S64°58'53"W	6834.68'			S56°52'19"W	2626.48'			S85°58'49"W	610.59'																											
92	3080.16'	214.66'	428.28'	95	1944.98'	828.26'	1524.09'	96-5																													
	S56°58'07"W	6104.28'			N77°00'26"W	1682.54'			S78°25'53"W	429.53'																											
93				95-1				96-6																													
	S56°56'46"W	6618.39'			N76°26'29"W	575.24'			S86°07'40"W	833.89'																											
94				95-2				96-7																													
	S56°55'25"W	2553.47'			N76°06'24"W	4624.30'			S86°02'26"W	733.78'																											
94-1				96				97																													
	S65°01'12"W	287.99'			N67°59'16"W	541.05'																															
94-2				96-1																																	
	S56°08'28"W	281.97'			1550.23'	152.70'	303.92'																														
94-3				96-2																																	
	S44°15'19"W	167.97'			N79°14'31"W	426.54'																															
94-4				96-3																																	
	S56°54'37"W	544.73'			N83°21'27"W	349.44'																															
					N89°34'36"W	1178.79'																															

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



RECORDED - FILED
 DATE: 19...
 TIME: ...
 Requested by: ...
 Address: ...

81-3
 BARROW
 DATE: 1-7-81
 TIME: 2:13 P
 Requested by: AS/DNR
 Address: FOR: ALYESKA PIPELINE SERVICE CO.

RECORDED - FILED
 DATE: 19...
 TIME: ...
 Requested by: ...
 Address: ...

RECORDED - FILED
 DATE: 19...
 TIME: ...
 Requested by: ...
 Address: ...

DRAWING NO. D-15-C500 SHEET 19 OF 22

DATE OF SURVEY: 8/3/79
 ENDING: 8/19/79
 NAME OF SURVEYOR: BOMHOFF & ASSOCIATES, INC.
 BURTON M. BOMHOFF
 LICENSE NO. 3087-S
 DRAWN BY: C.L.F.
 APPROVED: B.M.B.
 SCALE: 1" = 1000'

DESCRIPTION
A PORTION OF THE FUEL GAS PIPELINE
 WITHIN
T9S, R12E, U.M.

UNITED STATES DEPARTMENT OF THE INTERIOR
 STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
 ANCHORAGE, ALASKA

APPROVAL RECOMMENDED
 NAME: *James J. ...*
 TITLE: Chief, Division of Cadastral Survey
 Bureau of Land Management
 OCT 2 9 1981

APPROVED
 NAME: *Alan H. Kohl*
 TITLE: Acting Authorized Officer
 OCT 23 1980

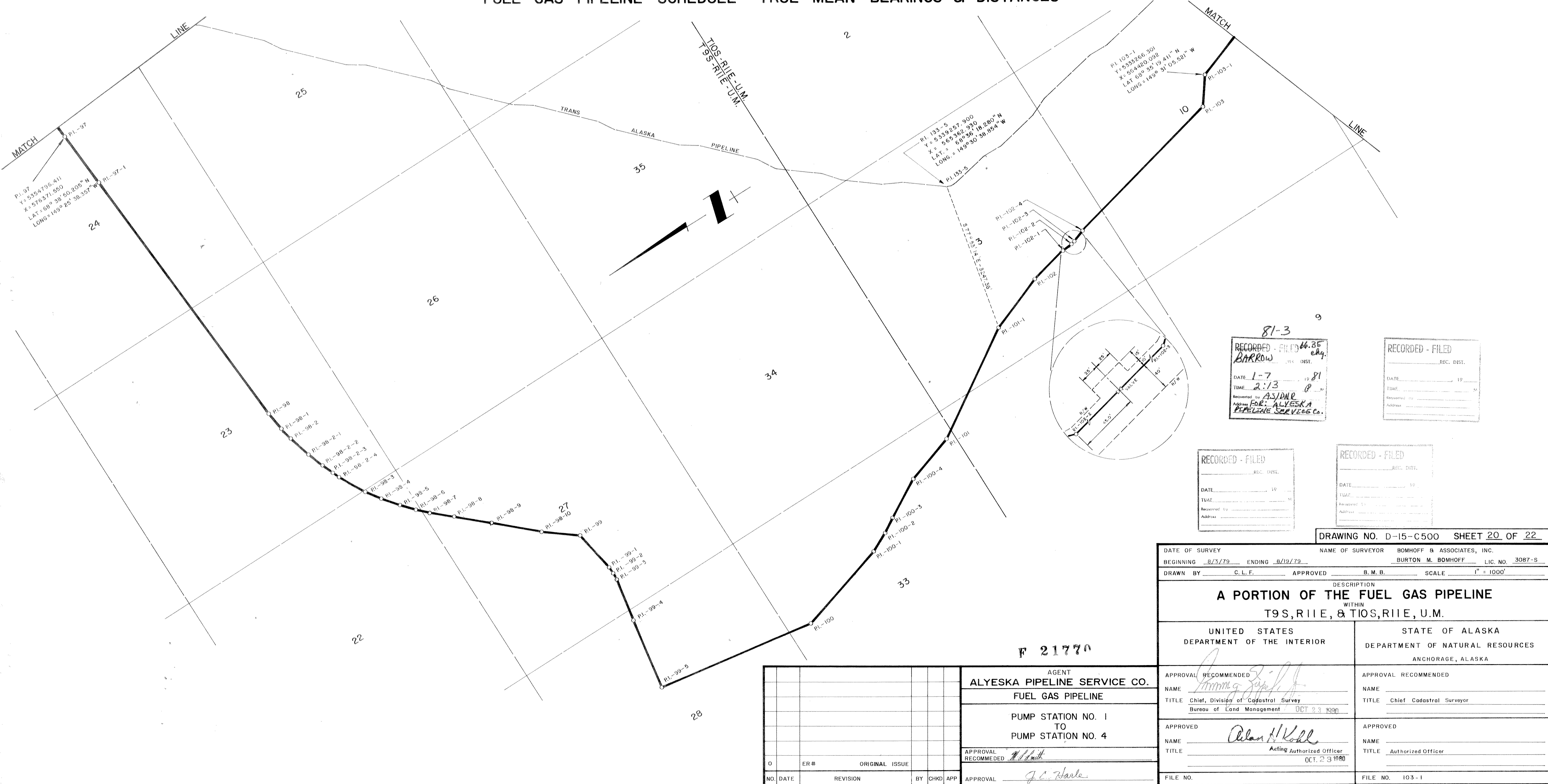
FILE NO. 103-1

F 21770

AGENT ALYESKA PIPELINE SERVICE CO.	
FUEL GAS PIPELINE	
PUMP STATION NO. 1 TO PUMP STATION NO. 4	
APPROVAL RECOMMENDED	<i>[Signature]</i>
APPROVAL	<i>[Signature]</i>
NO. DATE	REVISION
	BY
	CHKD
	APP
	APPROVAL
	<i>[Signature]</i>

BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			BEARING & DISTANCE			
POINT I. D.	RADIUS	TANGENT	L. CHORD	POINT I. D.	RADIUS	TANGENT	L. CHORD	POINT I. D.	RADIUS	TANGENT	L. CHORD	POINT I. D.	RADIUS	TANGENT	L. CHORD	POINT I. D.	RADIUS	TANGENT	L. CHORD	POINT I. D.	RADIUS	TANGENT	L. CHORD	
96-7				98-2-3	S65°27'34"W	163.13'		98-9	S42°56'00"W	1067.18'		100	S16°34'23"E	2055.27'		102-1	S07°35'56"E	266.95'						
	S86°02'26"W	733.78'																						
97	S86°07'22"W	1252.82'		98-2-4	S60°19'16"W	671.94'		98-10	S38°19'32"W	832.49'		100-1	S23°59'20"E	477.66'		102-2	S10°43'37"E	91.24'						
97-1	S86°13'55"W	6161.21'		98-3	S56°13'30"W	390.76'		99	S79°59'15"W	942.06'		100-2	S33°11'47"E	346.42'		102-3	S19°18'22"E	276.30'						
98	S82°45'53"W	435.18'		98-4	S51°38'35"W	407.70'		99-1	S87°46'47"W	120.45'		100-3	S28°51'26"E	957.37'		102-4	S13°08'31"E	3713.87'						
98-1	S79°10'25"W	288.99'		98-5	S48°51'09"W	354.99'		99-2	N88°19'56"W	164.78'		100-4	2384.62 212.65' 423.62'		103	580.03' 209.01' 393.27'								
98-2	S74°41'50"W	493.84'		98-6	S44°15'15"W	323.66'		99-3	N80°13'51"W	972.03'		101	1040' 121.26' 240.89'		103-1	699.65' 208.46' 399.58'								
98-2-1	S71°22'45"W	407.59'		98-7	S41°45'15"W	493.93'		99-4	N80°14'19"W	1564.41'		101-1	S21°00'58"E	1306.10'		103-2	S19°36'01"E	1226.88'						
98-2-2	S69°51'59"W	239.53'		98-8	S41°29'15"W	867.31'		99-5	1200.02' 1210.78' 1704.62'			102	5299.83' 364.43' 727.14'											

FUEL GAS PIPELINE SCHEDULE - TRUE MEAN BEARINGS & DISTANCES



81-3

RECORDED - FILED
REC. DIST.
DATE 1-7 1981
TIME 2:13 P
Requested by ASDAR
Address FOR: ALYESKA PIPELINE SERVICE CO.

RECORDED - FILED
REC. DIST.
DATE _____ 19____
TIME _____ M
Requested by _____
Address _____

RECORDED - FILED
REC. DIST.
DATE _____ 19____
TIME _____ M
Requested by _____
Address _____

DRAWING NO. D-15-C500 SHEET 20 OF 22

DATE OF SURVEY 8/3/79 ENDING 8/19/79 NAME OF SURVEYOR BOMHOFF & ASSOCIATES, INC.
 BEGINNING BY C. L. F. APPROVED BY B. M. B. SCALE 1" = 1000'

DESCRIPTION
A PORTION OF THE FUEL GAS PIPELINE
 WITHIN
T9S,RIIE, & TIOS,RIIE, U.M.

UNITED STATES DEPARTMENT OF THE INTERIOR STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES ANCHORAGE, ALASKA

AGENT
ALYESKA PIPELINE SERVICE CO.
 FUEL GAS PIPELINE
 PUMP STATION NO. 1
 TO
 PUMP STATION NO. 4

APPROVAL RECOMMENDED
 NAME [Signature]
 TITLE Chief, Division of Cadastral Survey Bureau of Land Management OCT 23 1980

APPROVAL RECOMMENDED
 NAME [Signature]
 TITLE Acting Authorized Officer OCT 23 1980

APPROVAL RECOMMENDED
 NAME [Signature]
 TITLE [Signature]

FILE NO. 103-1

F 21770

NO.	DATE	REVISION	BY	CHKD	APP	APPROVAL
0		ER# ORIGINAL ISSUE				

ALYESKA PIPELINE SERVICE COMPANY
RIGHT-OF-WAY
FUEL GAS PIPELINE
Sheets 1 through 22

81-3

ACKNOWLEDGMENT FOR AGENT AND ATTORNEY-IN-FACT FOR
ALYESKA PIPELINE SERVICE COMPANY

Alyeska Pipeline Service Company ("Alyeska") hereby assumes responsibility for all survey data shown on the plats covering the above and for the information pertaining thereto contained in the "Bearing and Distance and Reference Point Schedule" computer printout booklet attached to or being a part to this certificate. Alyeska hereby certifies that all work was performed to third-order accuracy standards and that all monuments actually exist as described and that all dimensions and other details are correct. Alyeska hereby attests that all signatures appearing on these copies are true and correct as affixed to the originals on the dates shown.

ALYESKA PIPELINE SERVICE COMPANY,
Agent for Lessees

Date: 10/31/80

Harry G. Brelsford
Harry G. Brelsford
Assistant Secretary

I, the undersigned, hereby certify that I am the Director, Alaska Division of Technical Services, and that the State of Alaska is the owner of lands, as shown hereon. I hereby approve this survey and plats for the State of Alaska.

Date: 11-5-80

Claud M. Hoffmann
Director
Alaska Division of Technical Services

I, the undersigned, hereby certify that I am the Authorized Officer for the United States Department of the Interior, Bureau of Land Management, and that the United States of America is the owner of lands, as shown hereon. I hereby approve this survey and plats for the United States of America.

Date: 11-3-80

Alan H. Kohl
Acting Authorized Officer
U. S. Department of the Interior

UNITED STATES OF AMERICA)
STATE OF ALASKA) ss.

THIS IS TO CERTIFY that on this 31st day of October, 1980, before me, the undersigned Notary Public, sworn as such, personally appeared Harry G. Brelsford, known to me to be the Assistant Secretary of ALYESKA PIPELINE SERVICE COMPANY, a Delaware Corporation, Agent and Attorney-in-Fact for AMERADA HESS PIPELINE CORPORATION, ARCO PIPE LINE COMPANY, BP PIPELINES INC., EXXON PIPELINE COMPANY, MOBIL ALASKA PIPELINE COMPANY, PHILLIPS ALASKA PIPELINE CORPORATION, SOHIO PIPE LINE COMPANY and UNION ALASKA PIPELINE COMPANY, and they acknowledged to me that they executed the foregoing instrument as the act and deed of ALYESKA PIPELINE SERVICE COMPANY as Agent for and on behalf of, and as the act and deed of, said Companies by authority of valid, existing Powers-of-Attorney from each of said Companies, and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first hereinabove written.

Joanne Potchorkaitis
Notary Public in and for Alaska
My Commission Expires: 7/20/81

STATE OF ALASKA)
THIRD JUDICIAL DISTRICT) ss.

THIS IS TO CERTIFY that on this 5th day of November, 1980, before me, the undersigned Notary Public, personally appeared Claud M. Hoffmann, Director, Alaska Division of Technical Services, to me known to be the individual named in and who executed the foregoing instrument, and acknowledged freely and voluntarily executing same for the uses and purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first hereinabove written.

Robert S. Means
Notary Public in and for Alaska
My Commission Expires: 8-8-82

STATE OF ALASKA)
THIRD JUDICIAL DISTRICT) ss.

THIS IS TO CERTIFY that on this 3rd day of November, 1980, before me, the undersigned Notary public, personally appeared Alan H. Kohl, Authorized Officer for the United States Department of the Interior, Bureau of Land Management, to me known to be the individual named in and who executed the foregoing instrument, and acknowledged freely and voluntarily executing same for the uses and purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first hereinabove written.

Lucy G. Peters
Notary Public in and for Alaska
My Commission Expires: December 27, 1983

81-3
RECORDED - FILED 66.35
BARROW REC. DIST. chg.
DATE 1-7-81
TIME 12:13 P.M.
Submitted by AS/DNR
Address Fort Alyeska
Pipeline Service Co.

81-3

RECORDED - FILED ^{66.35}
 BARROW REC. DIST. ^{CHG.}

DATE 1-7 19 81
 TIME 2:13 P M

Requested by AS/DNR
 Address FOR: ALYESKA PIPELINE SERVICE CO.
 1835 BRAGAW
 ANCH. AK. 99504

FUEL GAS PIPELINE MONUMENTATION SURVEY

RECORDED - FILED
 REC. DIST.

DATE _____ 19 ____
 TIME _____ M

Requested by _____
 Address _____

BEARING AND DISTANCE SCHEDULE REFERENCE POINT SCHEDULE

PREPARED FOR

ALYESKA PIPELINE SERVICE COMPANY

RECORDED - FILED
 REC. DIST.

DATE _____ 19 ____
 TIME _____ M

Requested by _____
 Address _____

RECORDED - FILED
 REC. DIST.

DATE _____ 19 ____
 TIME _____ M

Requested by _____
 Address _____

PREPARED BY
BOMHOFF & ASSOCIATES, INC.
 ANCHORAGE, ALASKA

FUEL GAS PIPELINE
MONUMENTATION SURVEY

BEARING AND DISTANCE SCHEDULE
REFERENCE POINT SCHEDULE

Prepared for

ALYESKA PIPELINE SERVICE COMPANY

1979

Prepared by

BOMHOFF & ASSOCIATES, INC.
Anchorage, Alaska

CONTENTS

Section A	Bearing and Distance Schedule
Section B	Reference Point Schedule

SECTION A

Bearing and Distance
Schedule

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
1	5852267.30	666418.60				
			220-27-09	873.75	SW 41-41-56	873.81
1-1	5851602.43	665851.70				
			196-36-45	3660.66	SW 17-51-08.8	3660.91
1-2	5848094.56	664805.13				
			204-29-37	185.48	SW 25-43-44.7	185.49
1-3	5847925.77	664728.23				
			196-58-17	436.10	SW 18-12-21.7	436.13
1-4	5847508.67	664600.94				
			189-48-30	252.26	SW 11-02-32.1	252.27
1-5	5847260.10	664557.96				
			196-32-10	1161.60	SW 17-46-06.9	1161.68
2	5846146.54	664227.35				
			209-13-5	7807.60	SW 30-26-03.6	7808.15
3	5839332.32	660416.16				
			197-4-5	3783.04	SW 18-15-53.3	3783.30
3-1	5835715.90	659305.82				
			182-32-2	1658.90	SW 3-43-32.8	1659.02
4	5834058.62	659232.48				
			203-42-25	4980.37	SW 24-53-25.6	4980.72
5	5829498.52	657230.08				
			209-46-45	2558.45	SW 30-57-0.3	2558.63
6	5827277.93	655959.41				
			199-28-14	3763.56	SW 20-37-53.4	3763.83
6-1	5823729.60	654704.92				
			199-27-3	3782.82	SW 20-36-06.1	3783.09
7	5820162.68	653445.25				
			199-29-16	3704.38	SW 20-37-42.9	3704.65
7-1	5816670.51	652209.45				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
7-1	5816670.51	652209.45	199-30-19	2773.81	SW 20-38-15.6	2774.02
8	5814055.88	651283.29	163-57-17	2987.09	SE 14-54-49.7	2987.31
8-1	5811185.16	652108.91	163-52-18	3170.76	SE 14-59-27.5	3170.99
9	5808139.19	652989.72	163-54-13	3370.36	SE 14-57-10.1	3370.61
9-1	5804900.96	653924.16	163-52-17	3434.44	SE 14-58-42.6	3434.69
10	5801601.70	654878.23	163-52-10	6128.69	SE 14-58-16.8	6129.14
11	5795714.29	656580.94	174-32-44	5362.87	SE 4-17-16.7	5363.25
11-1	5790375.71	657090.71	187-57-51	2165.89	SW 9-07-50.5	2166.05
12	5788230.71	656790.61	175-57-39	2192.72	SE 2-52-24.5	2192.88
12-1	5786043.43	656945.07	176-10-35	3236.53	SE 2-39-25.4	3236.76
13	5782814.11	657160.90	153-24-54	4016.35	SE 25-24-41.1	4016.63
14	5779222.41	658958.31	142-55-57	4919.56	SE 35-52-37.4	4919.91
15	5775296.96	661923.60	165-41-29	7606.46	SE 13-06-04.2	7606.99
16	5767926.46	663803.50	165-41-29	6912.16	SE 13-05-21	6912.64
17	5761228.73	665511.81				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
17	5761228.73	665511.81				
18	5752492.36	665848.34	177-47-38	8742.85	SE 0-58-49.2	8743.45
18-1	5752145.92	665692.26	204-15-14	379.98	SW 25-28-46.1	380.01
18-2	5752017.31	665609.66	212-42-39	152.84	SW 33-56-07.8	152.85
18-3	5751716.73	665447.64	208-19-32	341.47	SW 29-32-57.2	341.50
18-4	5751495.28	665365.53	200-20-39	236.18	SW 21-34-00.4	236.20
19	5748468.95	663729.22	208-23-59	3440.38	SW 29-36-56.5	3440.62
19-1	5745209.90	663908.78	176-50-47	3263.99	SE 1-56-36.7	3264.21
19-2	5744079.27	664099.08	170-26-46	1146.54	SE 8-20-33.8	1146.62
20	5740531.80	664400.69	175-08-25	3560.27	SE 3-38-49.8	3560.51
21	5735126.89	664405.29	179-57-05	5404.91	SW 1-09-50.9	5405.28
22	5730916.22	665082.57	170-51-44	4264.80	SE 7-55-23.7	4265.09
23	5726182.59	665415.00	175-58-59	4745.29	SE 2-47-58.7	4745.62
24	5719447.27	668311.89	156-43-38	7331.89	SE 22-02-40	7332.39
25	5713325.77	670944.77	156-43-38	6663.69	SE 22-01-31.3	6664.14

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
25	5713325.77	670944.77				
25-1	5711796.31	671713.72	153-18-32	1711.88	SE 25-25-55.2	1711.99
26	5708478.53	673025.39	158-25-44	3567.66	SE 20-18-17.1	3567.90
26-1	5702864.49	674394.12	166-17-54	5778.48	SE 12-25-34.4	5778.86
27	5699806.84	674586.63	176-23-51	3063.70	SE 2-19-19.5	3063.90
27-1	5698960.69	674969.34	155-39-47	928.68	SE 23-03-17.3	928.74
28	5695360.02	676243.25	160-30-59	3819.38	SE 18-11-45.4	3819.63
29	5690631.74	677913.60	160-32-36	5014.64	SE 18-09-32	5014.96
29-1	5686119.38	679063.91	165-41-55	4656.68	SE 12-59-39	4656.97
30	5683154.14	679827.95	165-33-04	3062.09	SE 13-8-7.5	3062.28
31	5677288.22	681334.71	165-35-39	6056.35	SE 13-05-05.7	6056.73
32	5670045.49	683190.43	165-37-44	7476.68	SE 13-02-21	7477.15
32-1	5666855.46	684008.28	165-37-13	3293.20	SE 13-02-20.1	3293.40
32-2	5660701.58	685588.92	165-35-41	6353.64	SE 13-03-23.6	6354.02
32-3	5660631.49	685703.34	121-29-36	134.18	SE 57-09-08.5	134.19

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
32-3	5660631.49	685703.34				
			165-23-50	890.69	SE 13-14-51	890.75
33	5659769.57	685927.90				
			191-49-40	4982.03	SW 13-10-46.9	4982.33
33-1	5654893.32	684906.72				
			178-14-08	101.33	SE 0-25-00.3	101.33
33-2	5654792.04	684909.84				
			184-48-01	144.32	SW 6-08-52.9	144.33
33-3	5654648.22	684897.77				
			192-53-34	440.83	SW 14-14-24.1	440.85
33-4	5654218.51	684799.40				
			200-34-31	166.99	SW 21-55-18.4	167.00
33-5	5654062.17	684740.72				
			191-50-55	1911.81	SW 13-11-35.8	1911.93
34	5652191.09	684348.17				
			247-54-14	3951.10	SW 69-14-0.6	3951.34
35	5650704.84	680687.27				
			245-55-38	3905.49	SW 67-13-49.3	3905.73
35-1	5649111.82	677121.45				
			218-44-27	3051.85	SW 40-01-25.1	3052.05
36	5646731.42	675211.60				
			199-04-09	4842.38	SW 20-20-18.5	4842.69
36-1	5642154.77	673629.55				
			227-22-44	2286.91	SW 48-38-09.2	2287.06
36-2	5640606.20	671946.73				
			273-30-05	139.12	NW 85-14-54.7	139.13
37	5640614.70	671807.87				
			224-44-19	369.95	SW 45-59-14.5	369.98
37-1	5640351.91	671547.47				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
37-1	5640351.91	671547.47				
			258-00-52	1891.52	SW 79-15-18.9	1891.64
38	5639959.11	669697.20				
			211-56-29	1456.63	SW 33-10-21.2	1456.73
38-1	5638723.03	668926.57				
			243-40-48	3020.09	SW 64-53-53.8	3020.29
38-2	5637383.96	666219.57				
			242-36-33	611.41	SW 63-48-56.1	611.45
38-3	5637102.68	665676.70				
			244-22-44	819.95	SW 65-34-50.1	820.00
39	5636748.12	664937.38				
			186-15-25	1895.69	SW 7-27-17.9	1895.82
39-1	5634863.72	664730.78				
			192-12-35	1155.83	SW 13-24-21	1155.91
39-2	5633734.04	664486.33				
			194-55-19	179.77	SW 16-07-01.3	179.79
39-3	5633560.32	664440.04				
			190-07-30	203.52	SW 11-19-11.1	203.54
39-4	5633359.97	664404.26				
			191-48-49	1606.55	SW 13-00-24.5	1606.66
40	5631787.45	664075.35				
			199-34-59	696.02	SW 20-46-26.4	696.07
40-1	5631131.69	663842.07				
			204-58-24	243.07	SW 26-09-46.9	243.08
40-2	5630911.35	663739.45				
			197-30-42	373.66	SW 18-42-01.6	373.69
40-3	5630555.01	663627.01				
			199-59-26	399.64	SW 21-10-42.3	399.67
40-4	5630179.44	663490.39				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
40-4	5630179.44	663490.39				
40-5	5628644.87	662957.39	199-09-13	1624.50	SW 20-20-20.4	1624.61
40-6	5628414.47	662845.41	205-55-08	256.17	SW 27-06-06.3	256.19
40-7	5628253.92	662785.24	200-32-47	171.45	SW 21-43-43	171.47
40-8	5628060.46	662728.97	196-13-03	201.48	SW 17-23-57.1	201.49
40-9	5627726.82	662671.67	189-44-38	338.53	SW 10-55-30.2	338.55
41	5627516.33	662632.73	190-28-54	214.06	SW 11-39-44.6	214.07
41-1	5627407.98	662704.90	146-20-07	130.18	SE 32-29-01.9	130.19
42	5624865.11	662235.18	190-27-56	2585.89	SW 11-38-41.8	2586.07
43	5619230.08	660920.84	193-07-45	5786.27	SW 14-18-04.8	5786.68
43-1	5615540.34	661142.72	176-33-31	3696.41	SE 2-16-26.6	3696.67
44	5613964.71	661231.68	176-46-07	1578.15	SE 2-03-48	1578.26
44-1	5611243.37	661398.51	176-29-31	2726.45	SE 2-20-22.3	2726.64
44-2	5610913.01	662119.55	114-36-56	793.11	SE 64-12-46.6	793.17
44-3	5610815.25	662389.34	109-55-06	286.96	SE 68-54-23.8	286.98

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
44-3	5610815.25	662389.34	117-02-57	553.42	SE 61-46-23	553.45
44-4	5610563.59	662882.22	114-37-01	888.94	SE 64-12-02	889.00
45	5610193.30	663690.36	149-36-48	3209.52	SE 29-11-44.7	3209.74
46	5607424.67	665313.85	174-24-30	3216.44	SE 4-23-38.7	3216.66
47	5604223.56	665627.28	174-24-30	3906.05	SE 4-23-31.8	3906.32
48	5600336.09	666007.87	210-03-17	3198.08	SW 31-14-56.5	3198.30
49	5597568.00	664406.19	210-03-17	231.76	SW 31-14-33.2	231.78
49-1	5597367.40	664290.12	210-03-17	92.49	SW 31-14-31.1	92.50
49-2	5597287.34	664243.80	200-53-24	269.98	SW 22-04-36.1	269.99
49-3	5597035.11	664147.53	210-18-19	342.96	SW 31-29-27.5	342.99
49-4	5596739.02	663974.47	215-46-23	135.48	SW 36-57-28.9	135.49
49-5	5596629.09	663895.27	221-07-14	98.99	SW 42-18-17.3	99.00
49-6	5596554.52	663830.17	212-49-42	185.98	SW 34-00-43.6	185.99
49-7	5596398.24	663729.35	210-03-17	2328.70	SW 31-14-0.7	2328.86
50	5594382.64	662563.07				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
50	5594382.64	662563.07				
51	5589348.38	660729.25	200-00-54	5357.87	SW 21-10-57.3	5358.23
51-1	5586673.53	659754.89	200-00-54	2846.80	SW 21-10-18.5	2847.00
52	5584197.99	659870.19	177-20-00	2478.22	SE 1-30-49	2478.40
52-1	5582713.44	659940.84	177-16-32	1486.10	SE 1-34-15.8	1486.33
52-1-1	5582649.59	659945.32	175-59-26	64.01	SE 2-51-21.2	64.01
52-2	5582319.95	659970.68	175-36-00	330.61	SE 3-14-46.6	330.63
52-3	5581940.36	659987.36	177-29-03	379.96	SE 1-21-43.5	379.99
52-4	5581579.73	659992.14	179-14-24	360.66	SW 00-23-37.8	360.69
52-5	5580391.95	660047.47	177-20-00	1189.07	SE 1-30-46.1	1189.15
52-5-1	5580368.07	660050.58	172-34-11	24.08	SE 6-16-34.6	24.08
52-6	5580200.74	660089.91	166-46-26	171.89	SE 12-04-19.3	171.90
52-7	5579685.06	660113.93	177-20-00	516.24	SE 1-30-44.5	516.28
52-8	5579458.52	660117.97	178-58-38	226.57	SW 00-07-54	226.59
52-9	5579239.61	660103.14	183-52-33	219.41	SW 5-01-48.8	219.42

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
52-9	5579239.61	660103.14				
53	5578292.52	660145.25	177-27-14	948.03	SE 1-23-30	948.10
54	5571855.56	659177.23	188-33-09	6509.34	SW 9-42-10	6510.09
55	5567459.30	658516.09	188-33-09	4445.69	SW 9-41-45.7	4445.73
55-1	5567358.21	658502.50	187-39-32	102.00	SW 8-47-58.5	102.01
55-2	5567328.06	658502.06	180-49-29	30.15	SW 1-57-55.7	30.15
55-3	5567195.58	658513.56	175-02-27	132.99	SE 3-49-06	133.00
55-4	5567067.95	658503.97	184-17-46	127.99	SW 5-26-12.7	128.00
55-5	5566126.60	658363.42	188-29-32	951.78	SW 9-37-56.2	951.85
56	5565498.77	658150.31	198-44-58	663.02	SW 19-53-17.3	663.06
57	5561540.59	656342.27	204-33-01	4351.57	SW 25-40-52.7	4351.88
57-1	5561265.28	656269.64	194-46-44	284.73	SW 15-54-10	284.75
57-2	5560306.23	655820.77	205-04-53	1058.89	SW 26-12-12.3	1058.97
57-3	5560020.33	655644.20	211-41-54	336.03	SW 32-49-05.8	336.06
57-4	5559985.81	655628.33	204-41-27	38.00	SW 25-48-34.9	38.00

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
57-4	5559985.81	655628.33				
			204-33-41	2540.32	SW 25-40-35.1	2540.50
57-5	5557675.35	654572.40				
			204-25-21	2569.39	SW 25-31-45.6	2569.58
58	5555335.86	653510.06				
			202-13-58	676.93	SW 23-20-05.4	676.98
58-0	5554709.26	653253.93				
			202-14-27	3386.74	SW 23-20-13	3386.99
58-1	5551574.49	651972.05				
			181-40-28	3066.02	SW 2-45-54.3	3066.25
58-2	5548509.78	651882.46				
			181-40-41	497.54	SW 2-46-05.1	497.57
59	5548012.46	651867.89				
			161-53-38	2088.55	SE 17-00-50.5	2088.70
59-0	5546027.33	652516.97				
			162-02-03	852.95	SE 16-52-14.3	853.01
59-0-1	5545215.97	652780.06				
			162-13-02	503.61	SE 16-41-10	503.65
59-1	5544736.42	652933.87				
			170-18-00	425.02	SE 8-36-09.2	425.05
59-2	5544317.48	653005.48				
			167-12-51	370.84	SE 11-41-16.7	370.86
59-3	5543955.84	653087.55				
			172-45-46	185.59	SE 6-08-21.1	185.61
59-4	5543771.72	653110.93				
			175-37-14	168.47	SE 3-16-52.3	168.48
59-5	5543603.75	653123.79				
			182-07-46	290.33	SW 3-13-39.4	290.35
59-6	5543313.62	653113.01				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
59-6	5543313.62	653113.01				
60	5543083.02	653075.62	189-12-36	233.61	SW 10-18-29.3	233.62
60-1	5542932.83	653064.59	184-12-01	150.56	SW 5-17-53.4	150.61
60-2	5542600.81	653032.40	185-32-14	333.57	SW 6-38-05.1	333.60
60-3	5542180.20	652966.52	188-54-05	425.74	SW 9-59-55	425.77
60-4	5541746.18	652850.47	194-58-14	449.27	SW 16-04-01.4	449.30
60-5	5541373.99	652741.45	196-19-32	387.83	SW 17-25-16.4	387.85
60-6	5541005.51	652649.58	193-59-54	379.75	SW 15-05-35.2	379.79
60-7	5540796.59	652618.60	188-26-10	211.21	SW 9-31-49.6	211.23
60-8	5539955.33	652367.07	196-38-48	878.06	SW 17-44-23.4	878.12
60-9	5539580.16	652204.01	203-29-28	409.07	SW 24-34-58.4	409.10
60-10	5539073.46	652057.76	196-06-01	527.39	SW 17-11-26.4	527.43
60-11	5538935.15	652032.64	190-17-33	140.57	SW 11-22-56.6	140.58
60-12	5538914.91	652025.58	199-14-02	21.44	SW 20-19-25.5	21.44
60-13	5538799.40	651974.14	204-00-21	126.45	SW 25-05-43.4	126.46

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
60-13	5538799.40	651974.14				
61	5537638.55	651616.77	197-06-40	1214.61	SW 18-11-56.5	1214.70
61-1	5536384.01	651486.68	185-55-13	1261.27	SW 7-00-22.3	1261.36
61-2	5533124.25	651147.08	185-56-51	3277.41	SW 7-01-53.7	3277.65
62	5531308.70	650960.06	185-52-53	1825.16	SW 6-57-46.7	1825.29
63	5527366.79	650554.94	185-52-04	3962.67	SW 6-56-49	3962.97
63-1	5525752.20	650387.15	185-55-58	1623.29	SW 7-00-34.3	1623.41
63-2	5525221.83	650688.49	150-23-43	610.00	SE 28-31-39.7	610.05
63-3	5522483.64	652246.34	150-21-47	3150.32	SE 28-33-12.9	3150.56
64	5522196.17	652409.90	150-21-42	330.75	SE 28-32-56.7	330.78
64-1	5521848.58	652591.04	152-28-28	391.95	SE 26-26-06.4	391.98
64-2	5521532.22	652753.11	152-52-25	355.46	SE 26-02-04.9	355.49
64-3	5521407.53	652856.51	140-19-58	161.98	SE 38-34-28.3	161.99
64-4	5521217.76	652952.07	153-16-24	212.47	SE 25-38-00.4	212.49
64-5	5521036.25	652996.91	166-07-19	186.97	SE 12-47-03.9	186.99

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
64-5	5521036.25	652996.91				
64-6	5520612.92	653179.28	156-41-37	460.94	SE 22-12-42.9	460.97
64-7	5519469.18	653735.08	154-04-58	1271.64	SE 24-49-12.6	1271.73
65	5517242.89	655001.81	150-21-38	2561.43	SE 28-32-10	2561.62
66	5512013.24	654215.03	188-33-21	5288.51	SW 9-39-36.4	5288.90
66-1	5511347.34	654546.64	153-31-38	743.90	SE 25-22-14.3	743.95
66-2	5511141.07	654675.05	148-05-43	242.97	SE 30-48-03.2	242.99
66-3	5510800.53	654850.22	152-46-44	382.95	SE 26-06-58.1	382.98
66-4	5510723.38	654871.33	164-42-03	79.99	SE 14-11-37.3	79.99
66-5	5510630.54	654903.60	160-50-01	98.29	SE 18-03-38.3	98.30
67	5508650.92	655889.43	153-31-38	2211.51	SE 25-21-49.3	2211.67
68	5500510.24	654643.21	188-42-13	8235.52	SW 9-48-40.1	8236.12
68-1	5499874.84	654363.90	203-43-44	694.08	SW 24-49-48.6	694.13
68-2	5499736.569	654314.05	199-49-39	146.98	SW 20-55-39.9	146.99
68-3	5499538.13	654230.54	202-49-26	215.30	SW 23-55-24.9	215.31

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
68-3	5499538.13	654230.54	204-03-14	162.57	SW 25-09-10.8	162.58
68-4	5499389.67	654164.27	207-43-52	98.79	SW 28-49-47.1	98.80
68-5	5499302.23	654118.30	207-38-04	139.79	SW 28-43-57.3	139.80
68-6	5499178.39	654053.46	203-10-07	301.78	SW 24-15-58.3	301.80
68-7	5498900.95	653934.73	197-48-59	195.78	SW 18-54-47.4	195.79
68-8	5498714.56	653874.83	202-30-06	212.83	SW 23-35-52.7	212.84
69	5498517.94	653793.38	219-34-02	52.89	SW 40-39-47.7	52.89
69-1	5498477.16	653759.69				
70-1	5438977.53	650287.11	58-52-21	436.02	NE 59-56-09.1	436.05
70-2	5439202.92	650660.35	89-58-42	139.60	SE 88-57-23.8	139.61
71	5439202.98	650799.95	162-17-45	140.35	SE 16-38-18.4	140.36
71-1	5439069.27	650842.63	149-30-56	745.34	SE 29-25-02.3	745.39
71-2	5438426.97	651220.75	149-37-16	1658.63	SE 29-18-27.4	1658.75
71-3	5436996.07	652059.54	145-23-57	137.02	SE 33-31-35	137.03
71-4	5436883.29	652137.35				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
71-4	5436883.29	652137.35				
			132-35-41	255.33	SE 46-19-47.7	255.35
71-5	5436710.48	652325.31				
			145-42-16	390.87	SE 33-13-07.5	390.90
71-6	5436387.56	652545.56				
			157-22-12	222.54	SE 21-33-07.6	222.56
71-7	5436182.15	652631.19				
			143-42-16	939.76	SE 35-12-56.2	939.83
72	5435424.73	653187.48				
			155-52-26	7183.16	SE 23-02-03.4	7183.68
73	5428869.04	656123.57				
			180-00-52	1002.82	SW 1-06-57.8	1002.90
73-1	5427866.21	656123.32				
			173-57-53	214.76	SE 4-56-01.8	214.78
73-2	5427652.64	656145.90				
			179-51-02	316.19	SW 00-57-07.6	316.21
73-3	5427336.45	656146.72				
			190-06-50	134.24	SW 11-12-55.8	134.25
73-4	5427204.30	656123.15				
			180-00-52	3637.86	SW 1-06-56.1	3638.12
74	5423566.44	656122.23				
			166-35-14	2998.66	SE 12-18-34.5	2998.88
75	5420649.57	656817.81				
			174-37-15	4632.28	SE 4-16-21.4	4632.61
76	5416037.69	657252.07				
			196-19-08	345.00	SW 17-25-35.6	345.02
76-1	5415706.59	657155.13				
			196-25-04	203.68	SW 17-31-28.1	203.70
76-2	5415511.22	657097.56				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
76-2	5415511.22	657097.56				
76-3	5415258.08	656969.59	206-49-04	283.64	SW 27-55-25.3	283.66
77	5414931.95	656747.32	214-16-31	394.67	SW 35-22-48.4	394.70
77-1	5413961.90	655632.80	228-57-53	1477.55	SW 50-03-52.6	1477.66
77-2	5412286.46	654740.67	208-02-03	1898.15	SW 29-07-36.8	1898.29
78	5409987.15	654164.70	194-03-47	2370.36	SW 15-09-00.5	2370.53
79	5403170.09	651767.94	199-22-15	7226.11	SW 20-26-48.4	7226.64
79-1	5401060.01	650266.51	215-26-02	2589.73	SW 36-29-43.5	2589.93
80	5397706.29	648285.95	210-33-51	3894.88	SW 31-36-47.7	3895.17
80-1	5397298.55	648137.24	200-02-16	434.01	SW 21-04-44.8	434.04
80-2	5396744.85	647937.39	199-50-48	588.66	SW 20-53-12.1	588.70
81	5395940.75	647247.03	220-38-51	1059.80	SW 41-41-03.5	1059.88
81-1	5394953.14	646669.74	210-18-27	1143.96	SW 31-20-23	1144.05
82	5390632.16	644130.20	210-26-37	5012.00	SW 31-27-52.2	5012.38
83	5387016.60	641423.33	216-49-17	4516.57	SW 37-49-23.2	4516.92

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
83	5387016.60	641423.33	222-12-04	686.77	SW 43-11-29	686.83
83-1	5386507.84	640962.00	231-34-33	693.27	SW 52-33-45.3	693.32
83-2	5386076.99	640418.87	234-01-20	497.94	SW 55-00-20.8	497.98
84	5385784.47	640015.91	241-31-24	1799.09	SW 62-29-58.8	1799.23
84-1	5384926.66	638434.50	240-59-43	2616.86	SW 61-57-29.3	2617.07
85	5383657.79	636145.84	241-02-00	5768.35	SW 61-58-12.7	5768.81
86	5380864.19	631099.09	227-59-52	1185.75	SW 48-54-48.8	1185.84
86-1	5380070.73	630217.94	225-39-18	215.48	SW 46-34-01.7	215.50
86-2	5379920.12	630063.84	229-11-16	416.28	SW 50-05-53.4	416.31
86-3	5379648.04	629748.78	227-39-36	2689.45	SW 48-33-43.6	2689.67
87	5377836.62	627760.84	211-41-41	4749.09	SW 32-34-50.9	4749.48
87-1	5373795.81	625265.71	211-46-51	1116.38	SW 32-39-20.4	1116.47
88	5372846.81	624677.74	214-21-42	726.88	SW 35-13-59.1	726.93
88-1	5372246.78	624267.48	209-48-19	186.30	SW 30-40-30	186.32
88-2	5372085.12	624174.88				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
88-2	5372085.12	624174.88				
			215-46-14	52.86	SW 36-38-22.5	52.86
88-3	5372042.24	624143.99				
			218-46-09	175.67	SW 39-38-15.7	175.69
88-4	5371905.27	624033.98				
			214-21-42	957.26	SW 35-13-40.7	957.34
88-5	5371115.06	623493.69				
			214-09-43	1036.35	SW 35-01-26.8	1036.44
88-6	5370257.53	622911.75				
			217-06-35	276.55	SW 37-58-09.4	276.58
88-7	5370036.98	622744.89				
			279-36-29	181.55	NW 79-32-00.6	181.57
89	5370067.28	622565.88				
			233-46-10	332.32	SW 54-37-34.2	332.35
89-2	5369870.87	622297.82				
			280-29-54	1401.81	NW 78-39-02.2	1401.93
89-3	5370126.29	620919.47				
			289-49-33	259.13	NW 69-19-40.9	259.15
89-4	5370214.18	620675.70				
			267-56-11	193.11	SW 88-46-51.6	193.12
89-5	5370207.22	620482.72				
			280-29-54	651.16	NW 78-39-38.6	651.21
89-6	5370325.87	619842.46				
			267-10-21	1111.95	SW 88-00-26.6	1112.04
89-7	5370271.02	618731.87				
			276-18-54	149.16	NW 82-51-16.9	149.17
89-8	5370287.42	618583.61				
			268-33-51	107.04	SW 89-23-37.7	107.05
89-9	5370284.74	618476.60				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
89-9	5370284.74	618476.60				
89-10	5370251.46	618335.88	256-41-37	144.61	SW 77-31-20.3	144.62
90	5370193.98	617172.15	267-10-21	1165.15	SW 87-59-48	1165.25
91	5366821.79	610188.82	244-13-28	7754.90	SW 65-01-11.8	7755.56
92	5363850.84	604034.30	244-13-56	6834.08	SW 64-58-52.6	6834.68
93	5360460.58	598958.69	236-15-32	6103.74	SW 56-58-06.8	6104.28
94	5356786.22	593454.67	236-16-26	6617.80	SW 56-56-45.9	6618.39
94-1	5355368.76	591331.03	236-16-41	2553.24	SW 56-55-24.7	2553.47
94-2	5355244.25	591071.37	244-22-59	287.97	SW 65-01-12.4	287.99
94-3	5355084.58	590838.99	235-30-21	281.95	SW 56-08-27.9	281.97
94-4	5354963.00	590723.13	223-37-17	167.95	SW 44-15-19.0	167.97
94-5	5354660.62	590270.09	236-16-41	544.68	SW 56-54-36.5	544.73
95	5353201.53	588086.47	236-14-58	2626.25	SW 56-52-19.4	2626.48
95-1	5353555.88	586472.52	282-23-00	1652.39	NW 77-00-25.9	1652.54
95-2	5353684.85	585911.98	282-57-25	575.19	NW 76-26-28.9	575.24

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
95-2	5353684.85	585911.98	283-18-32	4623.87	NW 76-06-24.4	4624.30
96	5354749.28	581412.29	291-26-44	541.00	NW 67-59-15.7	541.05
96-1	5354947.07	580908.75	280-11-40	426.50	NW 79-14-31.4	426.54
96-2	5355022.56	580488.98	276-04-54	349.41	NW 83-21-26.5	349.44
96-3	5355059.58	580141.55	269-52-04	1178.69	NW 89-34-35.7	1178.79
96-4	5355056.86	578962.86	265-25-52	610.53	SW 85-58-49.3	610.59
96-5	5355008.22	578354.27	257-53-08	429.49	SW 78-25-52.6	429.53
96-6	5354918.09	577934.35	265-35-11	833.81	SW 86-07-39.5	833.89
96-7	5354853.92	577103.01	265-30-17	733.72	SW 86-02-25.8	733.78
97	5354796.41	576371.55	265-35-37	1252.70	SW 86-07-21.8	1252.82
97-1	5354700.17	575122.55	265-43-44	6160.64	SW 86-13-55.2	6161.21
98	5354241.34	568979.02	262-17-04	435.13	SW 82-45-52.9	435.18
98-1	5354182.93	568547.83	258-41-45	288.95	SW 79-10-24.7	288.99
98-2	5354126.29	568264.48	254-13-20	493.79	SW 74-41-50.2	493.84
98-2-1	5353992.02	567789.30				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
98-2-1	5353992.02	567789.30	250-54-26	407.55	SW 71-22-45.3	407.59
98-2-2	5353858.71	567404.16	249-23-47	239.51	SW 69-51-58.6	239.53
98-2-3	5353774.43	567179.97	244-59-27	163.12	SW 65-27-33.9	163.13
98-2-4	5353705.47	567032.15	239-51-19	671.88	SW 60-19-16	671.94
98-3	5353368.06	566451.14	235-45-44	390.72	SW 56-13-29.8	390.76
98-4	5353148.23	566128.13	231-10-57	407.66	SW 51-38-34.7	407.70
98-5	5352892.69	565810.50	228-23-38	354.96	SW 48-51-08.9	354.99
98-6	5352656.99	565545.09	223-47-51	323.63	SW 44-15-15.1	323.66
98-7	5352423.40	565321.10	221-17-57	493.89	SW 41-45-14.5	493.93
98-8	5352052.35	564995.14	221-02-08	867.23	SW 41-29-14.6	867.31
98-9	5351398.20	564425.78	222-29-10	1067.08	SW 42-56-00.1	1067.18
98-10	5350611.30	563705.06	217-52-58	832.41	SW 38-19-32.4	832.49
99	5349954.31	563193.92	259-32-59	941.97	SW 79-59-15.2	942.06
99-1	5349783.45	562267.57	267-20-44	120.44	SW 87-46-47	120.45
99-2	5349777.87	562147.26	271-14-05	164.77	NW 88-19-56	164.78
99-3	5349781.42	561982.53				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
99-3	5349781.42	561982.53				
99-4	5349939.16	561023.48	279-20-24	971.93	NW 80-13-50.6	972.03
99-5	5350193.06	559479.97	279-20-28	1564.26	NW 80-14-18.5	1564.41
100	5346733.59	558942.57	188-49-47	3500.96	SW 9-14-34.6	3501.3
100-1	5344768.17	559542.94	163-00-50	2055.07	SE 16-34-22.7	2055.27
100-2	5344333.23	559740.28	155-35-43	477.62	SE 23-59-19.9	477.66
100-3	5344044.76	559932.04	146-23-11	346.39	SE 33-11-46.8	346.42
100-4	5343209.76	560400.18	150-43-23	957.28	SE 28-51-26.4	957.37
101	5342144.08	560768.89	160-54-54	1127.66	SE 18-39-45.7	1127.77
101-1	5339914.61	562182.98	147-36-51	2640.11	SE 31-57-26.2	2640.36
102	5338699.10	562660.59	158-32-56	1305.98	SE 21-00-58.0	1306.10
102-1	5337897.49	562854.27	166-24-58	824.68	SE 13-08-47.5	824.75
102-2	5337633.19	562891.59	171-57-47	266.92	SE 7-35-56.2	266.95
102-3	5337543.69	562909.26	168-50-05	91.23	SE 10-43-37.3	91.24
102-4	5337283.66	563002.59	160-15-19	276.28	SE 19-18-21.9	276.30

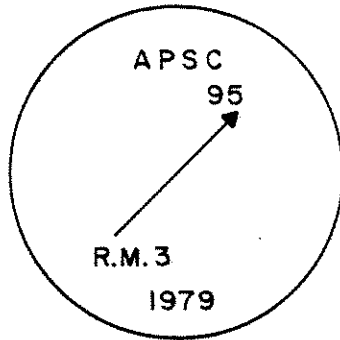
Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azimuth	Distance	Bearing	Distance
102-4	5337283.66	563002.59				
			166-24-58	3713.51	SE 13-08-31.1	3713.87
103	5333674.02	563874.78				
			126-47-01	680.88	SE 52-46-10.9	680.94
103-1	5333266.31	564420.09				
			159-56-59	1226.76	SE 19-36-01.2	1226.88
103-2	5332113.90	564840.68				
			159-11-42	1540.35	SE 20-21-06.3	1540.5
103-3	5330673.98	565387.80				
			143-41-03	1278.05	SE 35-51-29.6	1278.18
103-4	5329644.18	566144.70				
			160-38-12	1061.25	SE 18-54-06.2	1061.35
104	5328642.96	566496.57				
			181-27-53	586.83	SW 1-55-38.3	586.89
104-1	5328056.32	566481.57				
			165-14-03	3262.29	SE 14-18-01.7	3262.60
104-2	5324901.76	567313.02				
			164-48-44	265.14	SE 14-43-10.2	265.16
104-3	5324645.89	567382.49				
			176-02-41	102.67	SE 3-29-12.1	102.68
104-4	5324543.46	567389.57				
			163-45-33	136.03	SE 15-46-19.7	136.04
104-5	5324412.86	567427.61				
			157-37-41	139.94	SE 21-54-10.2	139.95
104-6	5324283.45	567480.88				
			164-48-44	240.69	SE 14-43-06.2	240.71
104-7	5324051.17	567543.93				
			162-36-43	608.53	SE 16-55-04.1	608.58
105	5323470.45	567725.79				

Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
105	5323470.45	567725.79				
			137-57-42	923.24	SE 41-33-54.9	923.32
105-1	5322784.77	568344.01				
			167-10-33	3165.46	SE 12-20-48	3165.76
105-2	5319698.26	569046.62				
			182-29-22	211.57	SW 2-58-09.7	211.59
105-3	5319486.89	569037.43				
			179-46-49	84.26	SW 00-15-36.6	84.27
105-4	5319402.63	569037.75				
			173-55-09	97.92	SE 5-36-03.9	97.93
105-5	5319305.26	569048.12				
			181-46-28	989.57	SW 02-15-15	989.67
106	5318316.16	569017.48				
			128-08-22	604.70	SE 51-22-45.6	604.76
106-1	5317942.71	569493.08				
			153-53-38	723.00	SE 25-37-20	723.06
106-2	5317293.48	569811.23				
			168-22-56	2139.73	SE 11-07-53.4	2139.93
106-3	5315197.58	570242.13				
			178-46-19	1295.42	SE 00-44-24.5	1295.54
107	5313902.46	570269.90				
			158-33-14	667.41	SE 20-57-26	667.47
107-1	5313281.26	570513.92				
			156-45-20	3041.89	SE 22-45-03.2	3042.17
108	5310486.29	571714.42				
			175-14-57	922.07	SE 4-15-10.6	922.16
108-1	5309567.39	571790.79				
			177-40-11	236.76	SE 1-49-55	236.78
108-2	5309330.83	571800.41				
			171-31-49	154.18	SE 7-58-17.1	154.19
108-3	5309178.33	571823.12				

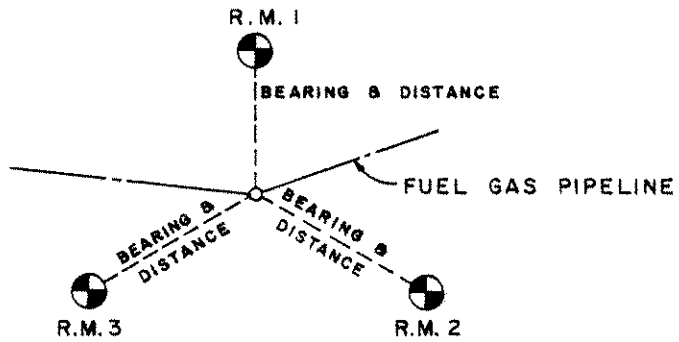
Point ID No.	Alaska State Plane Coordinates System Zone 4				True Mean	
	Northing	Easting	Azmuth	Distance	Bearing	Distance
108-3	5309178.33	571823.12				
108-4	5308611.44	571858.70	176-24-33	568.01	SE 3-05-32.3	568.06
108-5	5307615.27	571953.03	174-35-26	1000.62	SE 4-54-38	1000.71
108-6	5307266.27	571982.03	175-14-57	350.21	SE 4-15-05.5	350.24
108-7	5306174.05	572079.13	174-55-11	1096.53	SE 4-34-49.9	1096.63
108-8	5305868.12	572101.31	175-51-14	306.73	SE 3-38-46.1	306.76
108-9	5305624.53	572127.98	173-45-02	245.05	SE 5-44-56.9	245.08
109	5305388.29	572148.98	174-55-11	237.17	SE 4-34-47.7	237.19
109-1	5303658.57	572298.79	175-03-00	1736.20	SE 4-26-56.5	1736.36
109-2	5302858.22	572363.95	175-20-45	803.00	SE 4-09-09.2	803.07
110	5299835.88	572596.11	175-36-26	3031.24	SE 3-53-25	3031.53
110-1	5299624.39	572586.98	182-28-25	211.69	SW 2-58-36.3	211.71
110-2	5299556.96	572731.91	114-56-50	159.85	SE 64-32-57.6	159.87
110-3	5299567.08	572971.00	87-34-41	239.30	NE 88-04-58	239.32
110-4	5299494.30	573043.04	135-17-37	102.40	SE 44-12-01.7	102.41

SECTION B

Reference Point
Schedule



TYPICAL MONUMENT MARKING



TYPICAL FUEL GAS PIPELINE
MONUMENTATION DETAIL

Alyeska Fuel Gas Pipeline

Reference Monuments

Point ID	R.M. No.	True Bearing	Dist.
1	1	N 64-09-16 W	12.43
	2	N 69-57-34 E	83.77
	3	S 17-33-06 E	53.66
2	1	S 55-14-37 W	46.97
	2	N 62-24-58 W	87.11
	3	N 02-41-02 E	68.97
3	1	S 72-15-50 E	27.89
	2	S 54-53-10 W	54.58
	3	N 01-07-50 W	56.05
4	1	S 42-40-03 W	75.14
	2	N 79-44-19 W	87.37
	3	N 18-38-39 W	66.51
5	1	S 24-30-29 W	50.44
	2	S 71-48-03 W	53.05
	3	N 55-16-26 W	47.46
6	1	S 68-05-18 E	23.43
	2	S 56-56-54 W	50.25
	3	N 04-12-27 W	51.74
7	1	S 67-58-04 E	10.88
	2	S 63-32-23 W	57.55
	3	N 25-01-34 W	54.92
8	1	N 28-45-37 E	82.31
	2	S 89-13-35 E	81.55
	3	S 18-53-17 E	81.83
9	1	N 72-42-37 E	9.77
	2	S 29-34-52 W	55.70
	3	N 59-49-59 W	54.68
10	1	N 77-13-20 E	9.35
	2	S 34-26-48 W	55.70
	3	S 85-03-32 W	57.74

Point ID	R.M. No.	True Bearing	Dist.
11	1	S 07-39-40 E	62.20
	2	S 35-51-16 W	63.92
	3	S 84-40-45 W	53.34
12	1	S 55-56-46 E	34.05
	2	S 22-33-23 W	69.15
	3	N 35-49-15 W	41.96
13	1	N 80-30-53 E	51.10
	2	S 43-06-24 W	38.31
	3	N 15-00-06 W	35.42
14	1	N 30-33-56 E	38.95
	2	S 03-42-19 W	34.83
	3	N 45-16-54 W	63.95
15	1	S 11-14-26 W	77.12
	2	S 61-55-20 W	102.54
	3	N 55-01-09 W	94.90
16	1	N 78-11-30 E	12.48
	2	S 26-38-58 W	54.04
	3	N 54-17-41 W	54.74
17	1	N 12-45-57 W	43.92
	2	S 82-11-42 W	49.75
	3	N 55-35-37 W	55.00
18	1	S 60-04-12 W	46.65
	2	N 77-21-48 W	45.60
	3	N 36-38-48 W	88.82
19	1	N 38-52-15 E	81.56
	2	S 81-56-38 E	87.11
	3	S 11-21-27 E	75.32
19-2	1	N 79-51-02 E	8.60
	2	S 45-29-20 W	51.83
	3	N 54-31-10 W	46.58
20	1	N 08-57-05 E	41.01
	2	S 82-36-02 W	50.97
	3	N 42-57-30 W	53.93
21	1	S 62-56-04 E	31.46
	2	S 20-12-42 W	65.11
	3	N 40-33-30 W	44.46
22	1	N 00-52-37 E	47.33
	2	S 81-04-20 W	55.32
	3	N 51-37-05 W	46.76

Point ID	R.M. No.	True Bearing	Dist.
23	1	N 78-15-30 E	53.29
	2	S 18-34-20 E	38.25
	3	N 60-54-59 W	49.95
24	1	N 58-36-14 E	12.75
	2	S 21-35-10 W	52.61
	3	N 64-41-49 W	56.23
25	1	N 77-29-43 E	13.00
	2	S 15-33-48 W	59.98
	3	N 63-26-30 W	56.97
26	1	S 11-05-03 E	34.91
	2	S 71-07-15 W	54.44
	3	N 23-36-42 W	20.48
27	1	N 07-29-39 E	29.68
	2	N 78-30-35 E	59.54
	3	S 26-42-37 E	39.62
28	1	N 71-35-48 E	7.55
	2	S 31-52-24 W	57.10
	3	N 68-40-44 W	50.17
29	1	N 13-19-58 W	42.76
	2	S 64-52-49 W	46.28
	3	N 66-51-10 W	46.48
30	1	N 81-15-59 E	9.08
	2	S 28-43-58 W	56.88
	3	N 59-18-08 W	53.68
31	1	N 78-30-52 E	9.15
	2	S 38-49-41 W	51.64
	3	N 62-20-52 W	52.46
32	1	N 82-35-17 E	9.38
	2	S 32-16-04 W	54.08
	3	N 66-29-15 W	52.89
32-1	1	S 33-27-51 W	48.97
	2	S 79-07-33 W	58.48
	3	N 30-20-56 W	42.76
33	1	S 19-17-57 W	89.16
	2	S 66-16-24 W	89.23
	3	N 56-18-35 W	32.76
34	1	S 46-06-30 E	52.40
	2	N 82-58-07 W	185.00
	3	N 50-41-04 W	206.41
	4	N 14-12-54 W	195.53

Point ID	R.M. No.	True Bearing	Dist.
35	1	S 65-34-48 E	65.58
	2	S 24-34-48 E	50.83
	3	N 68-14-12 E	44.02
36	1	N 44-19-16 E	43.14
	2	S 53-55-15 E	59.92
	3	S 16-30-41 W	44.49
37	1	S 11-57-56 E	11.86
	2	N 56-23-56 W	50.01
	3	N 23-04-04 E	52.85
38	1	N 22-11-14 W	44.35
	2	N 77-38-16 E	44.30
	3	S 27-23-55 W	41.38
39	1	N 84-09-46 E	177.17
	2	S 52-25-00 E	187.41
	3	S 11-02-13 E	173.38
40	1	S 67-20-57 W	53.06
	2	N 72-15-40 W	57.18
	3	N 29-00-28 W	52.44
41	1	S 23-02-56 W	52.44
	2	S 66-08-34 W	52.12
	3	N 67-25-23 W	43.18
42	1	N 51-32-36 E	56.70
	2	S 77-07-26 E	44.33
	3	S 31-02-48 E	57.14
43	1	N 50-00-46 E	75.42
	2	S 85-43-14 E	72.47
	3	S 46-38-14 E	75.51
44	1	N 43-28-24 E	54.09
	2	S 50-57-54 E	48.12
	3	S 88-26-00 W	13.56
45	1	S 17-08-28 E	79.81
	2	S 45-02-05 W	69.65
	3	N 77-51-12 W	73.42
46	1	N 16-08-52 E	39.06
	2	S 51-39-33 E	34.07
	3	S 77-18-49 W	31.79
47	1	N 34-14-23 E	67.73
	2	S 45-12-08 E	59.64
	3	S 86-58-02 W	12.10

Point ID	R.M. No.	True Bearing	Dist.
48	1	N 24-59-32 E	34.29
	2	S 78-23-28 E	39.40
	3	S 05-57-28 E	39.10
49	1	N 77-25-25 E	65.38
	2	S 04-11-26 E	79.94
	3	N 61-54-41 W	13.80
50	1	N 38-11-11 E	54.16
	2	S 63-51-28 E	68.17
	3	S 16-37-13 W	57.91
51	1	N 69-14-01 E	58.35
	2	S 18-08-12 E	62.81
	3	N 69-35-36 W	12.27
52	1	N 37-09-51 E	58.32
	2	S 40-27-29 E	63.44
	3	N 73-47-31 W	8.67
53	1	N 30-59-35 E	55.84
	2	S 19-41-25 E	61.92
	3	N 86-01-05 W	37.78
54	1	N 46-10-16 E	56.89
	2	S 34-24-52 E	59.88
	3	N 83-05-25 W	10.65
55	1	N 53-23-36 E	42.31
	2	S 37-44-24 E	44.47
	3	N 76-53-24 W	12.04
56	1	N 62-45-28 E	53.63
	2	S 34-47-21 E	53.53
	3	N 68-38-32 W	17.11
57	1	N 57-32-16 E	52.36
	2	S 65-20-51 E	50.79
	3	S 15-48-32 E	57.92
58	1	N 72-14-42 E	64.63
	2	S 66-37-40 E	59.05
	3	S 22-31-18 E	64.03
59	1	N 35-13-22 E	47.97
	2	N 84-34-38 E	84.10
	3	S 44-33-19 E	53.66
60	1	N 51-04-24 E	55.53
	2	S 38-41-23 E	55.42
	3	N 83-24-26 W	10.25

Point ID	R.M. No.	True Bearing	Dist.
61	1	N 72-56-03 E	75.11
	2	S 75-54-14 E	18.89
	3	S 48-12-23 E	73.05
62	1	N 34-10-24 E	74.73
	2	S 74-39-58 E	36.62
	3	N 09-36-26 W	35.13
63	1	N 48-01-04 E	53.80
	2	S 35-07-49 E	50.73
	3	N 80-45-06 W	10.58
64	1	N 16-04-24 E	52.29
	2	S 71-21-18 E	48.68
	3	S 72-01-11 W	11.22
65	1	N 60-00-15 E	51.97
	2	S 16-07-45 W	48.78
	3	N 48-04-28 W	50.86
66	1	N 53-25-18 E	97.04
	2	N 81-28-48 E	83.35
	3	S 72-24-41 E	93.78
67	1	N 73-15-48 E	50.54
	2	S 07-51-08 E	48.73
	3	N 56-00-30 W	38.89
68	1	N 46-47-59 E	49.74
	2	S 77-39-20 E	42.37
	3	S 15-40-11 E	30.16
69	1	N 66-00-03 E	47.39
	2	S 25-05-40 E	25.03
	3	N 70-36-07 W	16.38
70-1	1	N 05-57-46 E	67.68
	2	S 46-40-21 E	65.03
	3	S 63-58-29 W	98.08
71	1	N 32-06-14 E	42.54
	2	N 78-38-59 E	37.80
	3	S 60-45-54 E	48.25
72	1	N 17-06-35 E	39.56
	2	S 77-07-25 E	38.64
	3	S 59-13-35 W	44.32
73	1	N 23-44-32 E	39.00
	2	S 49-00-28 E	36.75
	3	S 81-03-32 W	75.78

Point ID	R.M. No.	True Bearing	Dist.
74	1	N 53-49-55 E	206.66
	2	N 84-12-55 E	182.01
	3	S 66-08-05 E	205.65
75	1	N 35-06-33 E	54.09
	2	S 48-17-27 E	45.50
	3	S 76-20-33 W	27.80
76	1	S 06-24-42 W	36.02
	2	S 64-01-42 W	50.91
	3	N 50-39-17 W	53.46
77	1	S 89-17-15 E	46.70
	2	S 13-31-15 E	49.63
	3	N 49-23-15 W	26.75
78	1	N 67-11-53 E	48.83
	2	S 32-42-07 E	50.83
	3	N 69-06-07 W	15.66
79	1	N 77-55-17 E	53.96
	2	S 18-44-43 E	51.62
	3	N 60-45-43 W	25.47
80	1	N 74-53-11 E	67.46
	2	S 68-43-48 E	51.97
	3	S 29-28-53 E	64.56
81	1	N 75-42-38 E	67.32
	2	S 53-16-15 E	66.73
	3	S 02-40-18 E	69.33
82	1	S 88-54-03 E	61.07
	2	S 14-19-26 E	51.24
	3	N 55-27-01 W	14.29
83	1	N 81-02-48 E	43.43
	2	S 13-21-23 E	47.09
	3	N 51-27-08 W	9.92
84	1	S 69-02-45 E	59.66
	2	S 27-39-45 E	42.69
	3	S 23-42-15 W	57.25
85	1	S 69-05-05 E	57.59
	2	S 25-07-24 E	45.45
	3	S 16-48-41 W	56.36
86	1	S 81-20-14 E	62.80
	2	S 35-45-52 E	59.49
	3	S 12-00-13 W	58.20

Point ID	R.M. No.	True Bearing	Dist.
87	1	N 84-00-38 E	62.71
	2	S 47-04-37 E	58.31
	3	S 05-53-14 W	72.13
88	1	N 83-47-13 E	48.36
	2	S 20-49-47 E	48.67
	3	N 59-19-47 W	13.98
89	1	S 04-12-57 W	28.96
	2	N 64-57-03 W	37.02
	3	N 37-35-57 E	40.48
90	1	S 10-09-15 E	30.20
	2	N 60-19-14 W	43.59
	3	N 34-56-47 E	47.84
91	1	N 85-24-16 W	45.81
	2	N 33-01-08 W	39.45
	3	N 20-58-05 E	30.08
92	1	S 24-06-36 E	15.81
	2	N 06-04-40 W	62.40
	3	N 16-38-04 E	58.45
93	1	N 84-50-51 W	40.47
	2	N 33-27-53 W	40.00
	3	N 19-48-51 W	41.22
94	1	S 10-35-17 E	10.54
	2	N 69-03-52 W	43.76
	3	N 06-17-52 E	42.62
95-1	1	S 70-14-08 E	53.94
	2	S 35-32-52 W	44.38
	3	N 05-24-09 W	37.12
96	1	N 15-47-09 W	63.75
	2	N 17-28-51 E	67.38
	3	N 51-03-51 E	76.27
97	1	N 55-49-43 W	52.07
	2	N 12-58-43 W	46.84
	3	N 37-43-17 E	54.39
98	1	S 09-21-22 E	9.35
	2	N 45-39-22 W	56.39
	3	N 29-43-38 E	58.74
100	1	N 86-38-27 E	139.55
	2	S 09-55-33 E	61.54
	3	N 28-46-33 W	77.64

Point ID	R.M. No.	True Bearing	Dist.
101	1	N 66-35-19 E	17.30
	2	S 30-25-19 W	57.15
	3	N 66-22-41 W	56.29
102	1	S 23-13-36 W	48.95
	2	S 70-29-08 W	40.88
	3	N 60-43-39 W	47.81
103	1	N 58-33-00 E	44.10
	2	S 02-04-23 W	58.23
	3	N 56-36-46 W	49.22
104	1	S 32-07-59 W	69.24
	2	S 81-57-34 W	64.02
	3	N 58-59-45 W	94.13
105	1	N 00-16-09 E	70.47
	2	N 62-56-50 E	33.38
	3	N 82-22-00 W	52.27
106	1	N 23-23-20 E	52.70
	2	S 62-35-34 E	60.23
	3	S 69-36-05 W	50.45
107	1	N 26-45-26 E	53.61
	2	S 43-10-23 E	56.88
	3	S 78-19-50 W	56.08
108	1	N 39-00-57 E	84.86
	2	N 79-56-45 E	79.90
	3	S 68-23-01 E	88.65
109	1	N 89-40-29 W	13.61
	2	S 44-48-07 W	44.80
	3	N 50-53-58 W	47.19
110	1	S 70-03-49 E	21.44
	2	S 66-04-48 W	51.11
	3	N 29-32-42 W	58.09

81-3

RECORDED - FILED 66.35
 BARROW REC. DIST. chg.
 DATE 1-7 81
 TIME 2:13 P
 Requested by AS/DNR
 Address FOR: ALYESKA
 PIPELINE SERVICE CO.
 1835 BRAGAW
 ANCH. AK. 99504

RECORDED - FILED
 REC. DIST.
 DATE _____ TV _____
 TIME _____
 Requested by _____
 Address _____

RECORDED - FILED
 REC. DIST.
 DATE _____ TV _____
 TIME _____
 Requested by _____
 Address _____

RECORDED - FILED
 REC. DIST.
 DATE _____ TV _____
 TIME _____
 Requested by _____
 Address _____