Submit 1 Copy To Appropriate District Office <u>District I</u> – (575) 393-6161	State of New Mexico Energy, Minerals and Natural Resources	Form C-103 Revised July 18, 2013 WELL API NO. 30-025-48081			
1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION				
<u>District III</u> - (505) 334-6178	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE FEE			
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	6. State Oil & Gas Lease No.			
(DO NOT USE THIS FORM FOR PROPO	ICES AND REPORTS ON WELLS DISALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DISALS TO PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name INDEPENDENCE AGI			
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well Other ACID GAS INJECTION	8. Well Number 1			
2. Name of Operator Piñon N	9. OGRID Number 330718				
3. Address of Operator 465 W	NM Highway 128; Jal, NM 88252	10. Pool name or Wildcat AGI: Devonian/Fusselman			
4. Well Location					
Unit Letter C:	829 feet from the NORTH line and	1,443 feet from the EAST line			
Section 20	Township 25S Range 36E 11. Elevation (Show whether DR, RKB, RT, GR, e.	NMPM County LEA			
	3,103' (GR)	(c.)			
12. Check	Appropriate Box to Indicate Nature of Notic	e, Report or Other Data			
NOTICE OF IN	NTENTION TO: SU	BSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	PLUG AND ABANDON REMEDIAL WO	_			
TEMPORARILY ABANDON	_	RILLING OPNS. P AND A			
PULL OR ALTER CASING DOWNHOLE COMMINGLE	MULTIPLE COMPL CASING/CEME	INT JOB			
CLOSED-LOOP SYSTEM					
OTHER:	OTHER: 20	21 Annual Summary Injection Data Report			
	pleted operations. (Clearly state all pertinent details, a ork). SEE RULE 19.15.7.14 NMAC. For Multiple Completion.				
INDEPENDENCE AGI #1 - In (MAOP 4,779 psig, NMOCC O	itial Annual Report (2021) from September 1, 2023 order R-21455-A)	1 through December 31, 2021			
The Piñon Midstream IIC Inde	nendence AGI #1 (API: 30-025-48081) was initially t	out into service on August 21, 2021, pursuant to			

The Piñon Midstream, LLC Independence AGI #1 (API: 30-025-48081) was initially put into service on August 21, 2021, pursuant to NMOCC Order R-21455-A. The well went through a commissioning phase during which numerous systems in the Dark Horse Facility had to be optimized resulting in a somewhat variable operation at the Independence AGI#1. This commissioning period included the remaining month of Q3 and part of Q4 of 2021. The quarterly reports for each of these periods were submitted timely at the end of the two respective quarters.

Consistent with the reporting requirements of NMOCC Order R-21455-A, this annual report includes the data and analysis of surface injection pressure, TAG injection temperature, casing annular pressure, as well as bottom-hole injection pressure and temperature (the "injection parameters") for the partial period of 2021 in which Independence AGI #1 operation occurred (partial Q3 through all of Q4 2021). By the end of 2021, injection parameters are generally stable and have yielded the following average results, which are described and shown in detail in the attached report, Table 1, and Figures 1 and 2:

Surface Measurements: Average TAG Injection Pressure - 1,802 psig, Average TAG Injection Temperature - 110 °F, Average TAG Injection Rate - 1,218 bbls (approx. 2,617 MSCD), Average Annular Pressure - 208 psig, Average Differential Pressure - 1,593 psig.

Down-hole Measurements: Average Bottom-Hole Pressure - 7,439 psig, Average Bottom-Hole Temperature - 192 °F.

Data collected and representative of calendar year 2021 exhibit the anticipated correlative behavior of the annular pressure with the injection rate, injection pressure and temperature, which demonstrate the operational behavior of a nominally functioning AGI well. Furthermore, excellent mechanical integrity is demonstrated over this period, as shown in the relationship between surface injection pressure and surface annular pressure, which has maintained differential pressure indicative of isolation between the two subsurface

environments. Since commissioning of the AGI well, TAG injection rates have generally increased as inlet volume to the Dark Horse Facility has increased (Ranging from approx. 1.8 to 5.4 MMSCFD), and increased rates of injection occur coincident with expected increases to surface- and bottom-hole injection pressure. This additional volume has resulted in a significant increase in the permanent sequestration of CO2 associated with this well.

For a brief period of operation, communication failure occurred between the facility control room and the Halliburton surface control panel for the bottom-hole P/T gauge (from Sep. 2 through Sep. 17, 2021). All data were accurately recorded and stored on the surface panel on-board backup memory and only the communication to the facility control room was impacted. The data included in this report have been sourced from the accurate on-board memory and a replacement panel was installed on September 17, 2021.

Overall, the Independence AGI #1 well displays excellent mechanical integrity and is functioning appropriately within the requirements of the NMOCC Order. Furthermore, the geologic reservoir has exhibited adequate response to injection operations and has easily accommodated the injection needs of the Dark Horse Facility. Based on this report, Piñon requests that the immediate notification parameters approved for 2021 for the facility remain the same for calendar year 2022.

I hereby certify that the information above is true and co	rint name David A. White, P.G. E-mail address: dwhite@geolex.com PHONE: 505-842-8000 E Use Only ED BY: TITLE DATE							
SIGNATURE JJ J J J	TITLE Consultant to Piño	on DATE 01/26/2022						
Type or print name David A. White, P.G.	E-mail address: <u>dwhite@geolex</u>	.com PHONE: <u>505-842-8000</u>						
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APPROVED BY:	TITLE	DATE						
Conditions of Approval (if any):								





ANALYSIS OF ANNUAL INJECTION TRENDS AND REQUEST TO CONTINUE OPERATION UNDER THE CURRENT IMMEDIATE NOTIFICATION PARAMETERS

PIÑON MIDSTREAM, LLC Independence AGI #1 (API: 30-025-48081) NMOCC Order: R-21455-A

This document presents the results from the analyses of injection parameter data, which reflect the operation of the Independence AGI #1 well during the 2021 calendar year. The AGI well serves the Piñon Midstream, LLC (Piñon) Dark Horse Treatment Facility in Lea County, NM, and was put into service on August 21, 2021. Since commissioning the AGI well, injection parameter data have been continuously monitored, recorded, and have been analyzed by Geolex, Inc. (Geolex) on a monthly basis. Pursuant to the requirements of NMOCC Order R-21455-A, injection data reports based on the analysis of injection parameter data have been prepared and submitted to NMOCD by Geolex.

The Independence AGI #1 well was drilled as a vertical well and completed to inject via an open-hole completion over the interval of Devonian through Fusselman Formation geologic strata. The well serves as the primary disposal method for acid gas (H₂S and CO₂) at the Dark Horse Gas Treatment Facility. In accordance with the requirements of the approved NMOCC Order (Order R-21455-A), Piñon has filed with the NMOCD an application for a redundant AGI well, the proposed Independence AGI #2. Following issuance of the redundant AGI well injection permit, the second AGI well will be drilled and completed and is intended to be put into service by the NMOCC deadline of November 2022.

Operations at the Piñon Dark Horse Treatment Facility will continue to utilize the Independence AGI #1 as the primary method for disposing of waste acid gas until a redundant AGI well can be constructed. To monitor the impact injection operations at the Dark Horse Facility have on the injection reservoir, Independence AGI #1 was completed with bottom-hole sensors, which provide the ability to monitor real-time reservoir conditions in the deeper Devonian by providing reliable bottom-hole pressure and temperature data. Additionally, surface injection data from the well is continuously monitored and collected relative to the following parameters:

- Treated Acid Gas (TAG) Surface Injection Pressure
- TAG Surface Injection Temperature
- Surface Annular Pressure
- Bottom-Hole Pressure and Temperature
- TAG Injection Rate from Compressors
- Differential Pressure (between injection tubing and casing annulus)

The above are the key parameters which are currently being recorded in the well in order to monitor the operations, prevent hydrate formation, and minimize corrosion potential. Since these parameters are useful indicators and predictors of potential operational or mechanical problems in the well, various levels of alarms have been established for each of these parameters. Surface injection parameters include three direct measurements (TAG injection pressure, TAG injection temperature, and surface annular pressure) and one (differential pressure) value calculated as the difference between measured injection pressure and measured annular pressure. The analyses of these parameters are useful in identifying long-term trends and in the development of appropriate alarm ranges for each parameter. Independence AGI #1 surface injection parameter data for the partial period of operation during calendar year 2021 are included in Table 1 of this report.

In additional to surface monitoring, the AGI well at the Piñon Dark Horse Facility is also equipped with bottom-hole pressure/temperature sensors, which monitor the injection tubing conditions and have been

installed on a mandrel immediately overlying the injection packer. The monitoring of these additional parameters aids significantly in determining appropriate Immediate Notification Parameters, which are required by NMOCC Order R-21455-A. As the Independence AGI #1 well was recently constructed, the current Immediate Notification Parameters are based on operational experience with other AGI systems, and the associated injection parameter data have demonstrated that these notification conditions have been appropriate for the Independence AGI throughout the partial period of 2021 operation. As additional operating data is recorded for the Independence AGI #1 well, long-term trends and analyses of these data will be utilized to further refine the Immediate Notification Parameters, as needed.

To assure that successful and safe operation of the AGI well is maintained, Geolex reviews and analyzes Independence AGI #1 injection parameter data on a monthly basis, and provides a quarterly injection report to NMOCD, in accordance with the requirements of NMOCC Order R-21445-A. Observed trends in the injection parameter data for the 2021 operational period from September through December can be seen in the Table 1 and Figures 1 and 2 of this report.

Analyses of the 2021 Independence AGI #1 injection parameter data demonstrate that the Siluro-Devonian injection reservoir is responding satisfactorily to injection operations with operating pressures observed to be within an acceptable and anticipated range. Throughout the period of 2021, TAG injection rates have generally increased as the Dark Horse Facility treatment volume has increased. As expected, any increase in the TAG injection rate produces a corresponding increase in surface- and bottom-hole injection pressure, and there are no indications that current reservoir conditions are impeding Piñon's ability to inject, nor are they exhibiting indication of unexpected pressure increase. For the partial period of 2021 operation, Independence AGI #1 injection rates have ranged from approximately 1.5 to 5.4 million standard cubic feet per day (MMSCFD).

Given the observations of the injection parameter trends, it is clear that the AGI well has demonstrated excellent mechanical integrity over the 2021 operational period, as shown in the relationship between surface injection pressure and surface annular pressure. These data trends show that an adequate pressure differential has been maintained between these two subsurface environments, thus, confirming the mechanical integrity of the system.

For a brief period in 2021 (September 2 through September 17, 2021), a communication failure occurred within the Halliburton surface control panel which monitors and controls the down-hole pressure and temperature gauge. Upon inspection of the panel, it was found that data were still being accurately recorded and stored in the on-board backup memory of the panel and only the communication capability to report to the facility control room had been impacted. Backup data from the panel were utilized to fill in periods of error within the facility records, and a replacement surface control panel was installed on September 17, 2021.

REVIEW OF STATISTICAL ANALYSIS OF INJECTION PARAMETERS, DEVELOPMENT OF AND REQUEST TO CONTINUE WITH APPROVED IMMEDIATE NOTIFICATION PARAMETERS FOR INDEPENDENCE AGI #1 (API: 30-025-48081) UNDER NMOCC ORDER R-21455-A

The statistical analyses of the injection parameter data of other AGI well projects were initially utilized for the purpose of identifying and establishing normal operating levels for the Independence AGI #1, which are continuously and automatically monitored via the facility control system. As Independence AGI #1 continues to be operated, collected injection parameter data have and will continue to be utilized to further refine the understanding of normal operating conditions and the determination of appropriate alarm ranges.

Since commissioning of the Independence AGI #1 well, all injection parameters have been continuously monitored, recorded, and analyzed by Geolex. Table 1 includes a summary of average injection parameter data for the Independence AGI #1 well for the period from startup through December 2021.

Based on the analysis of these trends, the original Immediate Notification Parameters remain appropriate for the future operation of the AGI well through calendar year 2022.

The current Immediate Notification Parameters for the Independence AGI #1 well are summarized below:

- 1. Exceedance of the approved maximum allowable operating pressure (MAOP) of 4,779 psig (surface) for a period greater than two hours
- 2. Failure of a mechanical integrity test (MIT)
- 3. Confirmation of any condition that indicates a tubing, packer, or casing leak
- 4. Consistent increase of the annular pressure to a value greater than 80% of the injection pressure
- 5. Any release of H₂S which results in an activation of the facility's Rule 11 H₂S Contingency Plan
- 6. Any workover or maintenance activity that requires intrusive work in the well

Based on the analysis of operating conditions for the 2021 calendar year, Piñon requests the current Immediate Notification Parameters remain in effect for the 2022 calendar year.

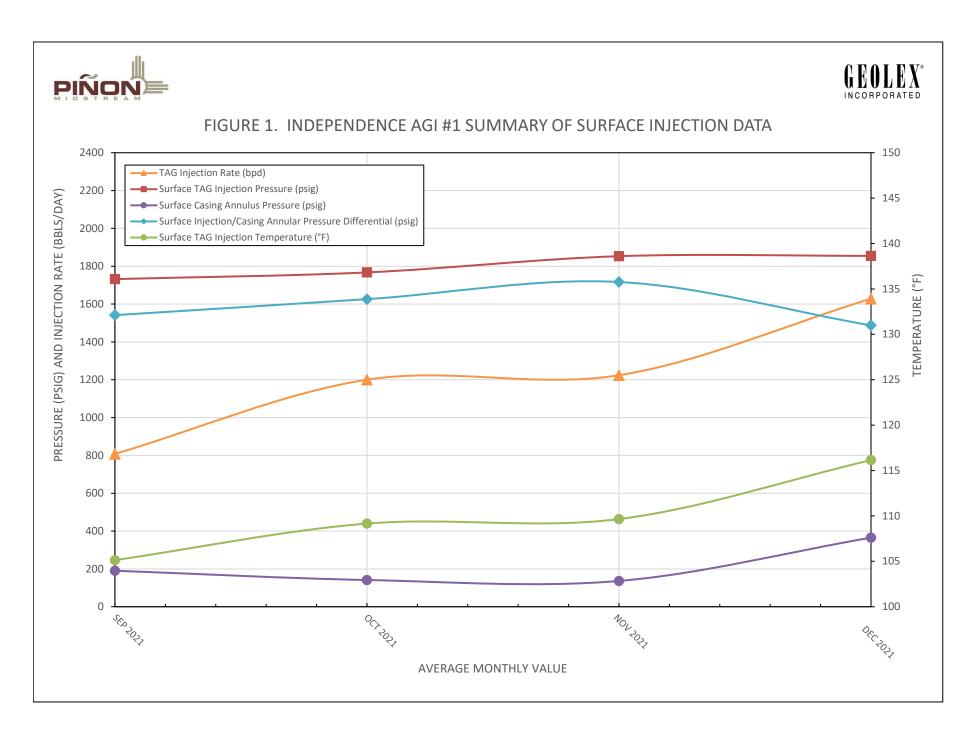


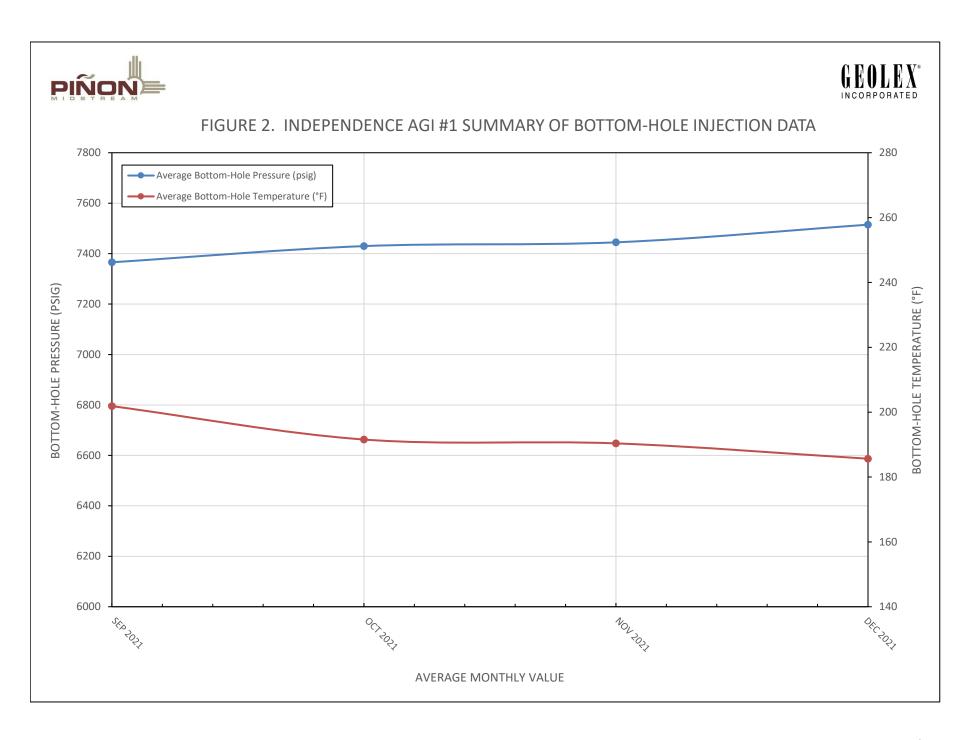


TABLE 1. INDEPENDENCE AGI #1 ANNUAL SUMMARY OF INJECTION PARAMETER DATA (September 2021 through December 2021)

Reporting Period	TAG Injection Temperature (Avg. °F)	Surface TAG Inj. Pressure (psig)	(psig)		Flowrate (bpd)	Flowrate (MSCFD)	Bottom Hole Pressure (Avg. psig)	Bottom Hole Temperature (Avg. °F)	Notes		
Monthly Average Operating Conditions											
Aug 2021 (Q3)	-	-	-	-	-	-	-	-	AGI well was put into service on Aug. 21, 2021, however, downtime and facility troubleshooting followed startup and quarterly reporting began on Sep. 1, 2021.		
Sep 2021 (Q3)	105	1732	190	1542	808	1750	7366	202	Communication failed between Halliburton Surface Control Panel for down-hole sensors and plant control room. Sensors continued to record accurately and data from 9/2 through 9/17 were recovered from panel on- board backup memory. Surface panel was replaced.		
Oct 2021 (Q4)	109	1767	141	1626	1200	2545	7430	192			
Nov 2021 (Q4)	110	1853	136	1717	1224	2626	7445	190			
Dec 2021 (Q4)	116	1855	365	1487	1628	3386	7515	186			
Average Operating	Conditions & S	tandard Deviatio	n								
Average (2021)	110	1802	208	1593	1215	2577	7439	193			
Standard Deviation (2021)	4	54	93	87	290	579	53	6			
Lifetime Average	110	1802	208	1593	1215	2577	7439	193			
Lifetime Standard Deviation	4	54	93	87	290	579	53	6			

NOTE: Due to the minimal operating history for the Independence AGI #1 (Q3 through Q4 2021), data are summarized as monthly averages, rather than typical quarterly averages reported for AGI wells. Once additional operating data has been collected for calendar year 2022, lifetime operating data will be summarized based on quarterly average values.







INDEPENDENCE AGI #1

UL C - S20 - T25S - R36E API: 30-025-48081



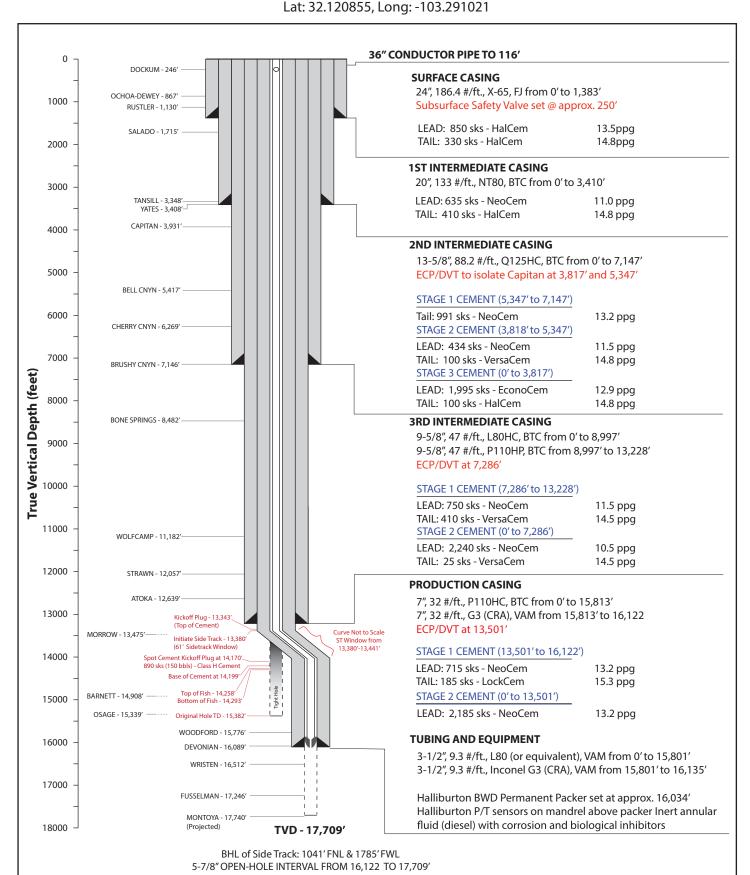


Figure 3. As-drilled well schematic consisting of a surface string of casing, three intermediate strings, and a production string with associating tubing/equipment and cement types. Original hole and sidetrack are shown.

HALLIBURTON

GEOLEX INC

H	ALLIBU	RIO	N	Ind	ependence AGI #1	Company Rep.	IT Wil	karson
Lea Calla Cara				Lea County, NM	Service Specialist		J.T. Wilkerson Carlos Chavez	
Installation			7/25/2021 Office		830-308-9929			
(50)	Installation	Length	Depth	Jts.	[00] (CD 0 11 (441) 44	Description	OD	ID
	23 22 21	29.60 15.80	15.25 44.85 60.65		23) KB & Hanger (11' + 4.: 22) Slick joint. 3 1/2" 9.2# 21) Space out pup joints		3.500 3.500	2.959 2.959
	₹ 20	204.95	265.60	7	20) 3 1/2" 9.2# L-80 Tubin	g	3.500	2.959
	19	6.68	272.28		19) 6' x 3 1/2" 12.7# L-80	VAMTOP Tubing Sub	3.500	2.707
	18	7.27	279.55		18) 3 1/2" NE HES SSSV Line 3 1/2" 12.7# VAMT	Nickel Alloy 925 w/Alloy 825 Control OP Box x Pin	5.620	2.562
	17	11.42	290.97		17) 6' x 3 1/2" 12.7# L-80	VAMTOP Tubing Sub	3.500	2.707
					16,075' Center Ele 16,113.56' Center	with 27k # compression. ements per wireline Elements per tubing run et w/ 9 screws @3,375 # 1k		
	16	15,462.82	15,753.79	528	16) 3 1/2" 9.2# L-80 Tubin	g	3.500	2.959
	15	328.66	16,082.45	8	15) 3 1/2" 9.2# VAMTOP (G3 Tubing	3.540	2.959
	14 13 12 11	6.00 1.25 6.00 8.00	16,088.45 16,089.70 16,095.70 16,103.70		13) 2.562" R Nipple 3 1/2' 12) 6' x 3 1/2" 9.2# VAMTO	OP Box x Pin SM2550 25 Ch Sub ' 9.2# VAMTOP Box x Pin Ni Al. 925 OP Box x Pin SM2550 25 Ch Sub Irel 3 1/2" 9.2# VAMTOP Box x Pin	3.540 4.073 3.540 4.660	2.959 2.562 2.959 2.959
	10	6.00 0.66	16,109.70 16,110.36		· ·	OP Box x Pin SM2550 25 Ch Sub embly 9.2# VAMTOP Nickel Alloy 925	3.540 4.470	2.959 2.959
S S S S S S S S S S S S S S S S S S S	8		16,113.56		8) 7" 26-32# x 4.00" BWS	Packer Nickel Alloy 925	5.875	4.000
	7	11.7	16,125.26		7) 4.00" x 12' PBR Nickel	Alloy 925 4 3/4"-8 UN 2A Pin x Pin	5.032	4.000
	6	0.6	16,125.86			7/8" 6.4# VAMTOP BxP Ni Alloy 925	5.750	2.409
	5	8.14	16,134.00		5) 8' x 2 7/8" 6.4# VAMTO	P BxP Tbg Sub CRA Alloy 925	2.875	2.409
	4	1.39	16,135.39		4) 2.313" R Nipple 2 7/8"	6.4# VAMTOP Box x Pin Ni Alloy 925	3.241	2.313
	3	8.2	16,143.59		3) 8' x 2 7/8" 6.4# VAMTO	P BxP Tbg Sub CRA Alloy 925	2.875	2.409
	2	1.71	,			" 6.4# VAMTOP BxP Nickel Alloy 925	3.241	2.205
	1	0.6	16,145.90		1) 2 7/8" 6.4# VAMTOP S	tainless Steel Pump Out Plug	3.669	2.441
				544	TOTAL JOINTS.			

Figure 4. Independence AGI #1 as-built injection tubing and equipment schematic